CORPORATION FINANCE

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PREFACE

Whether we like it or not, we live in a financially organized society. This fact has rudely penetrated the consciousness of the entire American population. Today as never before, the public is scanning the financial horizon. The complexities that have caused untold losses to investors have also caused losses and insecurity to wage earners and salaried employees. The result is a widespread analytical interest in financial affairs. People are not now content with a vague, generalized familiarity with the terminology of finance. They are prying beneath the surface. They want to understand the structure and functioning of business institutions and to delve into the manuals and statistical records. They want to know not only how business functions in practice, but also why. That is, they want to know why economic principles produce one result under one set of conditions and another result under another set of conditions. Hence, the main purpose of the present treatise is to present the nature of, procedures for, and financial theory underlying corporate financial structures and policies. Economics, law, and accounting are integrated in the final result. The point of view is general, but is supported by ample specific materials. Much attention is given to financial structure and to financial theory. Primarily, an attempt has been made to present a groundwork of analysis and reasoning which can be applied to any situation. To borrow from one of the world's ablest financial economists, the theory of finance "does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking, which helps its possessor to draw correct conclusions." Nevertheless, theory must be grounded in facts—actual business facts. For this reason much specific research material has been introduced in order to keep the discussion "close to the ground."

The present work presents the subject from the composite viewpoint of the business man, the lawyer, the investment analyst, the underwriter, and the professor. It provides the essential understanding that the student should have on entering business and also provides substantial foundations on which he can later pursue the subjects of security analysis, investment banking, and accounting theory. The text sets forth actual clauses from stock certificates and mortgages and discusses problems connected with them. The chapters on segregated risk financing, the theory of issuing securities, recapitalization, direct property owning consolidations, the principles of holding company financing, and depreciation consist very largely of materials not ordinarily found in books on corporation finance. Definite yardsticks are set down for the issue of securities and these yardsticks are specifically applied to simple, consolidated, holding company, lessee, and reorganized financial structures.

The illustrations of financial structure are rigid. However, the rigid structures are designed to be only starting points around which the beginning student can organize his information and theory. Once the student has mastered these structures, the instructor can drive home the variability of conditions and the lack of integrity of set formulas. Each chapter leaves many opportunities for active class discussion. The professor is given ample opportunity to perform his own particular functions.

In a book of this nature it is impossible to acknowledge all the sources to which one is indebted. Over a period of years the author has used the standard texts of practically all writers on corporation finance. He has necessarily been influenced by them. Therefore, acknowledgment must be made to all the text-writers in this field. For specific assistance in his researches, the author is indebted to Professors M. H. Robinson and H. M. Gray of the University of Illinois. He is also indebted to his brother, R. W Field, of the University of Oklahoma and to his wife, Constance Ann Field, for invaluable assistance in preparing the manuscript. The *Journal of Land and Public Utility Economics,* the *Rocky Mountain Law*

Review, the *Public Utilities Fortnightly,* the *University of Colorado Studies, The Tax Magazine,* and the University of Illinois have kindly permitted the author to use parts of his previously published research materials on corporation finance in this volume.

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CORPORATION FINANCE

CHAPTER 1

INTRODUCTION

Nature of Corporation Finance.—Corporation finance deals with the raising, administration, and disbursement of funds by corporations. It embraces a large number of problems, viz., the merits of the corporation as compared with other types of business organizations; the types of legal instruments used in obtaining funds,—e.g., types of stock, bonds, notes, mortgages; the rights, duties, and obligations of security holders; types of financial structures; methods of selling securities and extinguishing debts; determination of income, dividend, reserve, and working capital policies; expansion, consolidation, reorganization, and recapitalization of existing corporations; and a host of other financial policies and problems of modern business.

Classification of Corporations.—For convenience in discussion and organization of material, corporations are usually treated in groups. Thus, Moody's *Investors Service* assembles the financial records of corporations in five large volumes. The steam railroads constitute one volume. These companies are sufficiently similar in their structure and problems to permit discussion as a unit. The local public utilities constitute a second volume. These corporations include telephone, telegraph, manufactured gas, natural gas, electric light and power, electric railway, and a number of lesser types of companies. The characteristics of these companies vary much from group to group, but they are usually subject to similar types of public regulation. Hence, the utilities can be discussed as a class, though adjustments must be made for types. Government securities constitute a third volume. This group covers national, state, and local government securities. There is great variation in the legal status of these units from state to state and nation to nation. However, the grouping is logical for reference purposes. Banks,

insurance companies, investment trusts, real estate, companies, and some others are grouped in a finance volume. Here each type varies so much from the others that subgroups alone have significance. However, there is similarity between groups in that the companies are financing companies. The last volume is a catch-all for all companies not allocated to the other volumes. It is the *Industrials* volume. Here are found all types of corporations from coal mining to airplane manufacturing enterprises. Companies found in this volume must also be treated by groups having similar characteristics. Thus, the *street* speaks in terms of the *oils,* the *steels,* the *motors,* the *coppers,* the *rubbers,* etc. All of these groups have separate economic problems which influence their financial structures and policies.

Financial Plan.—Sound financial policies are laid out in the form of a plan. Corporation financing is no exception. When a business is organized, raises funds, or is reorganized, it proceeds according to some scheme. If it is a new enterprise, the first major problem is that of choosing a form of organization—e.g., partnership, trust, or corporation. If the corporation is chosen, the next problem is that of raising necessary funds. Here the amount of funds required and their sources must be determined. The securities must be so issued as to distribute income, risk, and control to suit the dominating individuals. In solving the problems thus raised, surveys must be made. Marketing analysts estimate the volumes of sales that can be made at different prices. Engineers analyze the types of buildings and machinery needed. Accountants estimate the amounts of money required to purchase the required assets, the probable income, and the probable expenses. Financial analysts set up all data in terms of balance sheets and income statements and then compare these with the statements of other similar enterprises in order to double check the engineers and accountants. Next, they work out the types of securities to be used in raising the funds. Lawyers survey both the legal aspects of the type of business organization and the contracts with security holders and bankers. The making of marketing, engineering, accounting, financial, and legal surveys, the formulating of the final plan, and the putting of the

plan into effect are usually referred to as promotion. The individuals who direct these activities are called promoters. However, promotion and promotional activities are not limited to the financing of a new company. Existing companies are always adding new products or new lines and raising funds to undertake new activities. Small companies are constantly being combined into larger ones. Companies are buying up control of other companies. Insolvent companies are being reorganized. In fact, the organization of new companies is a relatively unimportant part of present day corporation financing. The recasting of existing financial structures and the consolidation of existing companies into larger enterprises overshadow the small company promotions. The old type of individual promoter has also passed from prominence. Today, the research departments of large companies are constantly finding new products, and the companies add them to existing lines or organize new subsidiaries to manufacture them. Engineering firms with large staffs promote public utility projects. Strong financial groups, like the du Ponts, obtain control of and rehabilitate companies like United States Rubber Company.

Form of Financial Plan.—As indicated above, the heart of the financial plan is an estimated balance sheet. This will show the amounts of each class of assets required for the successful prosecution of the business: the amount of cash that must be on hand for comfortable operations; the amounts that will be tied up in receivables and inventories; the amounts that must be spent for land, buildings, and machinery; the amount that will be absorbed in prepaid expenses and losses before the enterprise is on a profitable basis. It will also show how the funds will be raised, that is, the amounts of current liabilities, of bonds, and of different classes of stock to be outstanding. The balance sheet will be accompanied by an income statement showing for a period of future years the estimated sales of products or services, the estimated costs, depreciation, net earnings, interest charges, and net income for shareholders. A statement of policies and charter and security provisions will accompany the balance sheet and income statement. These will show where voting control rests and possible future risks.

The Balance Sheet.—The balance sheet is an itemized statement of the resources and liabilities of a business. Since all financial discussions come to a focus on balance sheet and income statement changes, it is necessary for the student to be familiar with the content and terminology of these statements. Otherwise, he will miss much of the significance of financial discussions. The following balance sheet is typical of the steel industry. However, each industry will show variations in the items listed; so the student should familiarize himself with the statements of other types of companies.

YOUNGSTOWN SHEET AND TUBE COMPANY

CONSOLIDATED BALANCE SHEET AS OF DECEMBER 31

(Moody's Standardization)

ASSETS	1937	1936	1935
Manufacturing properties	$209,640,752	$204,062,315	$201,278,084
Coal mining properties	17,638,412	17,525,045	18,485,737
Iron and zinc ore properties	16,332,643	16,221,209	15,932,263
Employee housing facilities	7,370,400	7,485,753	7,566,987
Misc. properties	1,740,804	1,704,877	2,588,192
Total properties	$252,723,011	$246,999,199	$244,851,263
Depletion reserve	9,669,318	9,313,963	9,055,901
Depreciation reserve	109,170,746	106,942,109	102,950,140
Net properties	$133,882,947	$130,743,128	$132,845,222
Patents and licenses, net	397,725	455,845	353,627
Reacquired common stock	231,209	308,278	385,348
Bank stock, etc.	613,736	661,651	879,855
Other stocks and bonds	1,156,860	1,648,883	1,844,758
Investments and advances	8,041,992	8,258,579	10,135,421
Current assets:			
Cash	4,653,874	7,682,244	7,807,933
U. S. Government sec. at cost		81,958	160,620
Other marketable securities		93,682	111,526
Notes and acc'ts rec., net	20,723,854	22,009,999	15,749,556
Inventories	49,272,509	40,374,629	35,781,408
Due from employees	53,702	49,086	66,800
Employee purchase contracts	483,463	410,775	443,661
Insurance fund securities	158,025	158,025	158,025
Restricted cash, net	68,862	115,370	112,570
Deferred charges	902,506	770,764	614,015
Total	$220,641,266	$213,822,894	$207,450,396

Liabilities	1937	1936	1935
5½% stock (par $100)	$ 15,000,000	$ 15,000,000	$ 15,000,000
Common stock (no par)	105,039,670	86,803,097	75,256,097
Minority interest	33,655	23,250	20,943
Funded debt	58,500,000	78,253,000	85,337,000
Current liabilities:			
Loans payable	5,000,000		3,000,000
Accounts payable	5,476,249	5,631,392	3,293,870
Accrued taxes	3,841,096	2,243,495	1,355,018
Dividends payable	206,250	206,250	206,250
Ore in excess of pay	1,402,787	886,753	397,408
Accrued interest	407,250	666,190	287,500
Other accruals	1,112,104	1,503,109	1,292,063
Insurance fund res.	158,025	158,025	158,025
Res. relin. and rebuild	3,270,283	2,897,784	3,265,493
Res. for contingencies	200,000	175,000	175,000
Earned surplus	20,993,897	19,375,547	18,405,729
Total	$220,641,266	$213,822,894	$207,450,396
Current assets	$ 74,650,237	$ 70,291,596	$ 59,677,893
Current liabilities	17,445,737	11,137,190	9,832,109
Net working capital	$ 57,204,500	$ 59,154,406	$ 49,845,784

Assets in the Balance Sheet.—The item, manufacturing properties, shows the original book values of the land, buildings, machinery, and equipment used by the company in its steel producing operations.

The coal mining, iron and zinc ore, employee housing, and miscellaneous property items are self-explanatory.

The assets designated as "total properties" are known as fixed assets because of their fixed character. That is, they consist of assets of a permanent nature used in the business.

The depletion reserve account is an account which reflects the estimated decrease in value of the ore and coal properties that has taken place by the digging out and disposal of the resources.

The depreciation reserve account reflects the estimated decrease in value of the other fixed assets that has come about through wear, tear, obsolescence, inadequacy, action of the weather, and other conditions.

Since properties are ordinarily carried on the books at their original costs until they are scrapped and removed from the

books, and since the estimated decrease in book value of the properties is reflected by the depreciation and depletion reserve accounts, the estimated present book value of the properties is found by deducting the reserve accounts from the property accounts. This process gives the item, net properties. In the case of the Youngstown Sheet and Tube Company, the statement indicates that properties for 1937 which were originally set up on the books at $252,723,011 have been written off to a figure of $133,882,947. That is, they now have an indicated value of a little more than 50% of their original value. This is a normal relationship for a relatively old company because it has in service properties of all ages from new to those ready to be scrapped. The persistent march of property to the scrap heap will ordinarily give a current value of slightly more than 50% to the plant account.

The student should be aware of one factor in balance sheets as published by going concerns. They usually do not reflect actual values of properties. Standard accounting methods set the properties up on the books at cost at time of acquisition. These costs remain on the books, and depreciation is based on them, regardless of changing values. Consequently, many of the asset accounts are more in the nature of historical cost records than they are of current valuations. Occasionally a firm reappraises its properties and readjusts its asset valuations, but these firms are in the minority.

The patents item covers the book value of patents owned by the company. The value may represent the cost to the company of acquisition of the patents from others, the cost of research to develop the patents, or an arbitrary value. However, the cost basis is usually preferred by accountants. The actual value of the patents to the business is usually far different from the value at which they are carried on the books. Since the government restricts the life of patents to 17 years, the company writes this book value off on a 17-year basis. Hence, the "net" signifies that the amortization reserve has been deducted from the original figure at which the patents were carried.

The license item (combined with patents) represents the

amounts prepaid by the company for the right to use patented processes and devices of others. When full payments are made in advance, such payments are amortized over the life of the licensing agreement (normally the life of the patent on which it is based). Hence, these costs are also shown *net* to indicate that the amortization reserve has been deducted.

Reacquired common stock is stock of the company which the directors have caused the company to repurchase. This item is ordinarily known as treasury stock because it has been returned to the company's treasury. Since this stock formerly represented an equity in the company and has now been returned, it represents merely a suspended cancellation of rights and not an asset.

Bank stock, etc., represents outside investments held by the corporation. In this particular case, the corporation acquired the stock and securities in the course of the reorganization of failed banks in which it had deposits.

Other stocks and bonds represent securities held in other companies.

Investments and advances represent investments in the securities of, and short-term loans to, subsidiary companies, that is, companies which are controlled and operated as a part of the business of Youngstown Sheet and Tube Company.

Current assets are cash, cash items, and assets that will be converted into cash currently in the course of normal operations. This group of assets is also called working capital. Chapter 11 is devoted to a discussion of working capital problems. Some writers use the term working capital, in the sense of net working capital, to describe the excess of current assets over current liabilities.

Cash is self-explanatory. It covers all cash on hand and on deposit in banks. U.S. Government securities are considered a cash item in analyzing balance sheets. The corporation purchases them as a means of earning a return on idle cash balances.

Other marketable securities are securities of other corporations which are readily salable in the open market without serious price concessions. Marketability is a technical term

signifying price stability as well as salability. Almost anything is salable if the price is made sufficiently low, but the essential thing in securities is that they be readily salable without price sacrifice.

Notes and accounts receivable are the claims that the business has against its customers and other debtors. For example, if goods are sold on open book account, the claim is known as an account receivable. If the purchaser gives his promissory note to the company, the claim becomes evidenced by a note receivable. Financial difficulties of purchasers and other debtors prevent the collection of some claims each year. If the business could tell in advance which customers would not be able to pay, they would not sell goods to those customers. However, this is not the case. Consequently, the company sets up a reserve against bad debts. This reserve reflects the amount of bad debts that normally turns up in the course of business. The "net" indicates that the company has deducted this reserve from the amount of notes and accounts receivable as now carried on its books.

Inventories consist of raw materials, goods in process of manufacture, and finished goods ready for sale to customers.

The item, due from employees, represents claims against employees of the company. Most large corporations assist their employees by loans. In some cases they sell them securities or other property and permit them to pay for it on an installment basis.

Employee purchase contracts are claims against employees for property that the employees have purchased. These arise most frequently in connection with plans whereby the employee is permitted to purchase stock in a company at less than market price.

Insurance fund securities are securities held in a segregated fund to meet losses. Instead of paying premiums to an insurance company, the company sets the same amounts aside in a special fund and uses this fund to meet its insurable losses. These funds are usually kept in very liquid securities so that the amounts will be available when they are needed.

Restricted cash is another bank failure item. It represents

deposits which cannot be withdrawn at will by the company because restrictions have been placed on withdrawals.

Deferred charges represent items which have been paid for and will ultimately become a cost of operating the business, but which have not been used up at the present time. Prepaid insurance, rent, advertising, and similar items are good illustrations of this type of asset.

Those assets which can be touched, that is, physical assets, are called tangible assets. Assets that merely represent claims against others—for example, stocks, bonds, patents, licenses, notes and accounts receivable, bank deposits, and advances—are called intangibles. These are also called choses in action, that is, they give the holder a right to sue the other party in order to enforce the claim. Intangibles also fall in the personal property classification. However, personal property is a broader term and covers chattels as well as choses in action. Chattels embrace all types of tangible property that are not land or affixed to the land. Land and property attached to the land are termed real property. Accountants sometimes violate this classification by classing accounts and notes receivable, bank deposits, and owned securities as tangible assets.

Liabilities.—5½% stock (par $100) is preferred stock with a par or face value of $100 stated on the certificates of stock.

Common stock (no par) represents the owners' permanent interest in the business. "No par" signifies that no value is stated on the face of the certificates of stock.

Minority interest is the claim of minority stockholders of subsidiary companies to their proportionate interest in the assets of the subsidiary companies. Since the company has summarized all the assets of the subsidiaries in its consolidated balance sheet, it shows the claim of others to those assets as a liability in its consolidated balance sheet.

Funded debt is the debt of the company evidenced by bonds. Actually, the company has more than one issue of bonds, but the entire bonded debt is lumped together in a single item.

Current liabilities are those liabilities which will come due

currently. For convenience, accountants define "current," arbitrarily, to mean one year. The year is the normal accounting period. Consequently, all claims that will come due within that period are called current.

Loans payable are bank loans that the corporation has obtained to finance its working capital requirements.

Accounts payable are amounts owed trade creditors for materials purchased.

Accrued taxes are the estimated amount of taxes that the company expects to have to pay and has made provision for in its accounts.

Dividends payable account represents the liability of the corporation to shareholders for dividends declared, but not paid. Once the directors have declared a dividend, the corporation is liable to the stockholders, not as stockholders but as creditors. The stockholders have a claim which they can enforce by suit.

Ore in excess of payments represents an amount which the company must pay for ore that it has taken but not paid for.

Accrued interest represents the pro rata amount of interest on borrowed funds for the period since the last interest payments to date. In spite of the fact that interest is paid only at stated intervals, the company spreads the charge uniformly over the year. Hence, a statement taken at any time other than at an interest date will show a bookkeeping allocation of the unmatured interest for the period since the last interest date.

Other accruals are similar to the interest items. They represent claims that are not yet due but that will be payable in the future. Accrued wages ordinarily bulk large in these items.

Insurance fund reserve is an offset reserve matching the insurance fund carried among the assets. This reserve account indicates that a part of the assets, in excess of the liabilities and the stated amount of the capital stock, has been earmarked for a special purpose and is not available for general corporate purposes.

Reserve for contingencies is a part of the surplus which has been set aside to meet losses which are considered possible.

Earned surplus is the excess of total assets remaining after all liabilities, stated value of stock, and segregated reserves have been deducted. The term "earned" indicates that the excess arose because the corporation retained earnings in the business, instead of paying them all out as dividends. Some corporations show other types of surplus reserves—for example, reappraisal, capital, and donated surplus reserves. These terms merely indicate the origin of the excess.

Net working capital is the excess of current assets over current liabilities. It indicates the amount of working capital that is offset by long-term securities rather than by short-term claims.

Other Terms.—Capitalization is the total par value or stated value (i.e., value assigned to the securities on the company's books) of all outstanding long-term securities. The capitalization of Youngstown Sheet and Tube Company for 1937 is $178,539,670. It consists of $58,500,000 par value of bonds, $15,000,000 par value of preferred stock, and $105,039,670 stated value of common stock. Surplus does not evidence a permanent commitment of funds to the business and, hence, does not constitute a part of capitalization. The term "capitalization" is sometimes confused with capital. Capital is the total resources of the business, both tangible and intangible; whereas, capitalization is represented by an aggregation of creditor and ownership accounts on the liability side of the balance sheet. The two concepts should not be confused.

Capital stock account shows the amount that the stockholders have committed permanently to the business. This amount is not available for distribution as dividends until the business is liquidated.

Stockholders' capital is a term which designates the stockholders' interest in the business. In case of liquidation the stockholders are entitled to all assets remaining after creditors have been paid. Consequently, stockholders' capital can be calculated by adding the capital stock and surplus accounts together.

Book value is the value of a share of stock as shown by

the books. If we take the total assets of a corporation and deduct all liabilities and preferred stock, we get a total which belongs to the common stockholders. If we then divide this total by the number of shares outstanding, we will find the value of each share as shown by the books of the corporation. This book value may or may not approximate the market value of shares. Usually, market prices vary widely from book values.

Income Statement.—The income statement shows the changes that have taken place between the times of two balance sheets. It is a running account of the activities of the corporation between two periods of time. The income statement of Youngstown Sheet and Tube Company is a good sample statement. However, as is the case with balance sheets, income statements vary in content from company to company and industry to industry; so the student should familiarize himself with the statements of other types of companies.

YOUNGSTOWN SHEET AND TUBE COMPANY

CONSOLIDATED INCOME ACCOUNT AS OF DECEMBER 31

(Moody's Standardization)

	1937	1936	1935
Net sales	$144,288,797	$127,674,517	$ 86,788,923
Costs and operating expenses	112,301,098	101,431,999	70,123,884
Provision for doubtful accounts	298,327	475,515	329,657
Adm., general and selling exp.	7,360,555	5,831,279	4,917,385
Depreciation and depletion	6,949,866	6,837,763	5,683,843
Operating profit	17,378,951	13,097,961	5,734,154
Other income	1,993,407	2,444,410	1,467,606
Total income	$ 19,372,358	$ 15,542,371	$ 7,201,760
Idle plant expense	157,230	651,266	778,716
Net loss assets sold, etc.	1,558,559	128,556	100,416
Provision for contingencies	550,000		175,000
Balance for interest	$ 17,106,569	$ 14,762,549	$ 6,147,628
Interest	2,694,266	3,668,337	4,412,681
Federal tax (sub. cos.)	1,876,500	510,676	119,710
Surtax (sub. cos.)	323,500	4,229	
Minority interest	21,654	14,807	17,715
Net income	$ 12,190,649	$ 10,564,500	$ 1,597,522
Preferred dividends payable	7,472,754	2,268,750	206,250
Surplus for year	4,717,895	8,295,751	1,391,271
Times interest earned	6.35	4.02	1.39

Statement Items.—Net sales are the total sales after all returned sales and allowances have been deducted.

Costs and operating expenses include the costs of all materials, supplies, wages, salaries, and other items entering into the operation of the plants.

Provision for doubtful accounts represents the loss that is expected in connection with credit sales. As was noted, this amount is carried to a reserve account which is carried on the balance sheet or which is deducted from the balance sheet valuation of the accounts and notes receivable.

Administrative, general, and selling expenses are general expense items of the corporation which have not been included in the operating expenses. They cover the salaries of the general officers, the expenses of the sales department; and the overhead expenses which apply to the institution as a whole.

Depreciation and depletion are the annual charges made to cover the loss in value of physical properties as described in the discussion of depreciation and depletion reserves under the balance sheet section.

Operating profit is the excess of the sales figure over the deductions listed above. This represents the net results of running the business as a mining and manufacturing enterprise.

Other income is non-operating income, that is, interest from outside investments, etc.

Total income is the total of operating and non-operating incomes.

Idle plant expense is the expense connected with the ownership of plants which are not now required for operations. These expenses could be cut, if necessary, by liquidating the plants.

Net loss assets sold account is a non-recurring loss due to the liquidation of certain assets of the company. Such losses are segregated so that the investor will be able to make allowances for the fact that they do not recur regularly.

Provision for contingencies is a charge made in setting up a reserve account to cover a loss that the company expects to sustain.

Balance for interest indicates the amount that the business

has earned after all costs and expenses have been charged out. Since all costs were charged out before this balance was obtained, the business could pay out this entire balance without impairing the operating strength of the company.

Interest covers the payments for the use of borrowed capital, that is, bond interest and interest on bank loans. Some companies lump amortization of discount on bonds sold at less than par under the interest item. Other companies report amortization of discount as a separate item. It is a cost of borrowed capital, and from an economic standpoint can readily be lumped with the interest charge, but better practice segregates it.

Federal tax (subsidiary companies) is the charge made against income for the taxes payable to the federal government.

Surtax (subsidiary companies) is the charge made to cover taxes on the undistributed net income under the Revenue Act of 1936.

Minority interest represents the claim of minority stockholders in subsidiary companies to the earnings of those subsidiaries which have been combined in the consolidated statement of the parent company.

Net income is that part of the earnings which remains to stockholders after all prior deductions have been made.

Preferred dividends are the amounts which are distributed to the preferred stockholders during the current period.

Surplus for the year is the amount of earnings which is neither charged out as expense nor paid out as interest or dividends. These economic values remain in the business.

Times-interest-earned figures are obtained by dividing the interest payments into the balance available for interest.

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CHAPTER 2

NATURE OF THE CORPORATION

Form of Organization.—The corporation is a legal person separate and distinct from the natural persons who own stock in it and transact its business. Being a separate person in the eyes of the law, it takes title to property and enters into contracts in its own name. However, since its existence is nothing but a legal fiction, it must transact business through agents who are natural persons. The most important of these agents are the directors who are elected by the stockholders of the corporation. The directors, acting as a board, determine the policies of the corporation. They also appoint the other agents of the corporation. The principal other agents are the president, vice-presidents, treasurer, and secretary. However, they are routine officers who carry out policies set by the board of directors. Ultimate authority in the corporation always resides with the board of directors.

The powers of the corporation and the rights and obligations of individuals connected with it are fixed by the statutes under which it is organized. For example, the state, in giving the right to exist as a corporation, may say that the stockholders shall be liable for the corporation's debts to the extent of all the property that they possess. However, corporation laws are designed primarily with a view to restricting the liability of shareholders. Hence, statutes generally provide that the shareholder shall not be liable for the debts of a corporation. Nevertheless, in the case of some special types of corporations, this is not the case. The shareholders of banks have long been held to a greater degree of accountability than those of other corporations. Several states require shareholders not only to pay for their stock in full but, if a bank fails, to pay in an additional amount equal to the par value of their stock (double liability). In Colorado, they are required

to pay in twice the par value of their stock, the shareholder thus being subject to *triple liability*.

Every attribute of the corporation is subject to similar variation. The corporation may be restricted to a single line of business, or it may be permitted to engage in all lines of business. Some states are very strict and others very lax in the powers they confer on corporations organized under their laws. However, most states are liberal except for certain lines of business which they single out for special treatment. Thus, all corporations doing a banking business are required to be organized in the state in which they are doing business, unless they are incorporated by the federal government. Likewise, most states require public utilities to be domestic corporations (i.e., incorporated in the state). These corporations are so affected with a public interest that it is felt undesirable to permit them to exercise powers granted by a foreign state. Such variations are merely illustrative of a host of others. Enough has been said, however, to indicate that corporation powers vary from corporation to corporation, from state to state, and from time to time at the whim of the legislatures which pass the statutes.

Probably the most important feature of the corporate form is the limitation of the shareholder's liability and its effects on the aggregation of capital. The difficulties of formation, changes in charter provisions to permit expansion, and similar problems are primarily a question of being able to pay for the services of a lawyer of average abilities. However, an understanding of the nature of other types of business organization is essential to a proper understanding of these aspects of the corporation.

Individual Proprietorship.—The simplest type of business organization is the individual proprietorship. Assuming that he complies with zoning ordinances and licensing regulations which apply to all businesses of the particular type, an individual can start up a business without any formalities other than assembling the necessary assets and staff. He is acting as an individual with all the freedom with which an individual

orders his personal life. However, the courts will not distinguish his acts in business from his acts at home; nor will they separate his business property from his non-business property. A creditor of the business may levy upon his non-business property (e.g., his home or his car) without first exhausting his business property, or the groceryman can levy upon his business property for his household debts. All of his assets, business or otherwise, are on the same footing. The business does not stand on its own feet, but drags down the individual fortune if it fails. The fact that the business creditor can reach the individual property, as well as the business property, strengthens the credit of the individual proprietorship to the extent that there are additional liquidation values to protect loans; but since there is no way to obtain additional funds except by borrowing, the capital resources of the business are limited to the personal wealth as a margin of shrinkage protection. This limitation on the ability to raise capital definitely restricts the individual proprietorship to small businesses. When large amounts of capital must be assembled, some other type of organization must be used. If the sums needed are very large, the corporation is normally used because it permits the aggregation of a large number of owners and large amounts of ownership funds which are either adequate in themselves or can be used as a margin of shrinkage to protect borrowed funds.

General Partnership.—The general partnership is nothing but a group of individuals acting as agents of each other in the conduct of a common enterprise. The courts treat each partner as an individual. As in the individual proprietorship, the partner's individual property is a common fund with the business property for the satisfaction of business debts. Since each partner is the agent of the other partners, creditors can reach the individual property of a partner for all the debts of the partnership. That is, the partner's liability is joint and several—joint in that he is liable with the other partners for the liabilities of the joint enterprise, several in that creditors can levy on his property alone. The creditor can bring suit against

A, B, and C, doing business as the A, B, C Company, a partnership; have process served on A; and after judgment collect the entire amount due by levying on the separate individual property of A. A is then left to collect from B and C the shares that they should have contributed. If they have nothing, A must foot the whole loss. If the partnership is insolvent, it may be thrown into bankruptcy. In that case, the business creditors will have first claim against the business assets, and the personal creditors will have first claim against the individual assets; then any surplus in one group will be turned over to the other group of creditors. This marshalling of claims and assets is also followed in equity. However, only a relatively small proportion of unsuccessful partnerships is liquidated in bankruptcy (because the costs are so high), and the equity courts do not have the power that bankruptcy courts have to set aside preferences. Hence, the bankruptcy and equity court priorities of the creditor groups are of very limited significance. In most cases, creditors file actions at law and secure preferences on a first come-first served basis before the partnership comes under the control of an equity court. Further, both before and after insolvency, most jurisdictions make no distinction between business and individual property. If it can be levied on advantageously, the business property is levied on first; otherwise, the individual property of any partner served with process is seized. Once the individual property has been attached or seized on execution of a judgment for firm debts, the preference stands both at law and in equity. Only bankruptcy within four months can set it aside. This confusion of individual fortunes with business fortunes is a great handicap to the general partnership form of organization. It is overcome in the case of the corporation, as we have noted, by making the corporation a separate legal person and by limiting the liability of shareholders.

The agency factor is another difficulty of the partnership. Each partner can bind the other partners in any transaction in the regular course of business (as distinct from non-business matters) of the partnership. This factor increases the individual's risk by making him responsible for errors in judgment

and weaknesses in character of others. He can partially protect himself by providing in the partnership contract that certain powers shall be exercised solely by specified individuals. This makes the partner responsible for his conduct but does not bind outsiders unless they have notice of the limitation on the partner's authority to transact business. The public, in absence of notice, is permitted to rely on the general principle that each partner has full power to transact business that normally comes within the scope of the particular business the partnership is undertaking. In the case of the corporation, this weakness is overcome by having a board of directors charged with the responsibility of determining policies and designated officers charged with carrying them out. No stockholder can bind the corporation in anything. It is legally understood that the corporation is an entity separate and distinct from the persons who organized it and hold its shares, and can be bound only by its duly authorized agents. This separation of business identity from individual identity permits large numbers of persons to engage in a common undertaking without risk of being bound beyond their definite undertakings or harassed by lawsuits connected with the business. They can delegate authority to a president and can lodge policy determination in the hands of a relatively few men.

The partnership articles of association involve some other points of difference. The partnership can be formed by merely engaging in a common undertaking and acting in the manner that partners ordinarily act. The courts find a partnership in the conduct of the enterprise. However, a well-considered partnership should be set up by a written contract among the parties, specifying the amounts to be contributed, the method of sharing gains and losses, the powers and duties of the individual partners, etc. When this is done, there is a written framework similar to the charter which the state sanctions for a corporation. If it adds new members or drops out old members, the old partnership ceases, and a new partnership results. In contrast, if the corporation amends its charter to permit an increase or decrease in authorized stock, it is still the same corporation. Its life continues. If the partnership goes from

one state to another, it still continues its existence as the same partnership and merely moves. Since it is treated as a group of natural individuals, it has the freedom of action of individuals. However, when the corporation moves across state lines, it becomes a foreign corporation and has to comply with the statutes regulating the right of foreign corporations to do business in that state. If it wishes to become a domestic corporation, it must reincorporate within the state. Thus, a railroad like New York Central, running from New York City to Chicago, may file the same charter in several states in order to get domestic privileges. In other cases, the corporation may dissolve in one state and sell its assets to a new corporation organized in another state. The latter procedure is usually done when the business is moved from one state to another, and it may be done without moving the business if the incorporation laws of one state are more favorable than those of another and if the home state permits foreign corporations to do business within its borders.

Limited Partnership.—The limited partnership is a statutory organization like a corporation. It consists of one or more general partners and one or more limited partners. The limited partners are not liable to creditors of the partnership beyond the amount that they have committed to the enterprise. However, in order to be sure of this limitation of liability, the articles of partnership and public notice of them must comply strictly with the statute. The limited partners must avoid any holding out that they are general partners and must not display their names in such a way as to mislead the public. The statutes will usually be explicit on this point. If the limited partnership fails to comply with the statutory formalities, the limited partners will be held to the joint and several liability of general partners. Further, since the limited partnership is still considered to be an association of individuals, it has no standing in a state other than the state of organization. Outside the state of organization, it will be treated as a general partnership and the limited partners as general partners. Also, the limited partner can exercise no voice in the management.

This type of organization, like the corporation, requires legal services in complying with the statutes. It gives a degree of limitation of liability to some of the associates, but not to all of them. Its chief advantages lie in less taxation and less governmental red tape than is the case with the corporation. It permits the aggregation of larger amounts of capital than does the general partnership; but the limitation of liability is treacherous—limited partners sometimes finding that formalities have been overstepped.

Pennsylvania Limited Partnership Statute.—Selected sections of the Pennsylvania limited partnership statute follow. (Title 59, Purdon's Pennsylvania Statutes.)

SEC. 171. LIMITED PARTNERSHIP DEFINED. A limited partnership is a partnership formed by two or more persons under the provisions of section two, having as members one or more general partners and one or more limited partners. The limited partners as such shall not be bound by the obligations of the partnership.

SEC. 172. FORMATION. (1) Two or more persons desiring to form a limited partnership shall—

(a) Sign and swear to a certificate, which shall state:

(I) The name of the partnership,

(II) The character of the business,

(III) The location of the principal place of business,

(IV) The name and place of residence of each member, general and limited partners being respectively designated,

(V) The term for which the partnership is to exist,

(VI) The amount of cash and a description of and the agreed value of the other property contributed by each limited partner,

(VII) The additional contributions, if any, agreed to be made by each limited partner, and the times at which or events on the happening of which they shall be made,

(VIII) The time, if agreed upon, when the contribution of each limited partner is to be returned,

(IX) The share of the profits or the other compensation by way of income which each limited partner shall receive by reason of his contribution,

(X) The right, if given, of a limited partner to substitute an assignee as contributor in his place, and the terms and conditions of the substitution,

(XI) The right, if given, of the partners to admit additional limited partners,

(XII) The right, if given, of one or more of the limited partners to priority over other limited partners, as to contributions or as to compensation by way of income and the nature of such priority.

(XIII) The right, if given, of the remaining general partner or partners to continue the business on the death, retirement, or insanity of a general partner, and

(XIV) The right, if given, of a limited partner to demand and receive property other than cash in return for his contribution.

(b) File for record the certificate in the office of the recorder of deeds of the county in which the principal place of business of the limited partnership shall be located.

(2) A limited partnership is formed if there has been substantial compliance in good faith with the requirements of paragraph (1).

(3) The recorder of deeds shall record the certificate and the acknowledgment thereto, at large, in a book to be kept for that purpose, open to public inspection.

SEC. 175. A NAME NOT TO CONTAIN SURNAME OF LIMITED PARTNER; EXCEPTIONS. (1) The surname of a limited partner shall not appear in the partnership name, unless—

(a) It is also the surname of a general partner, or

(b) Prior to the time when the limited partner became such, the business had been carried on under a name in which his surname appeared.

(2) A limited partner whose name appears in a partnership name contrary to the provisions of paragraph (1) is liable as a general partner to partnership creditors who extend credit to the partnership without actual knowledge that he is not a general partner.

SEC. 191. LIMITED PARTNER NOT LIABLE TO CREDITORS. A limited partner shall not become liable as a general partner unless, in addition to the exercise of his rights and powers as a limited partner, he takes part in the control of the business.

Limited Partnership Association.—This type of organization is found only in the states of Michigan, New Jersey, Ohio, and Pennsylvania. It is set up by complying with a statute and is a partnership with transferable shares. The shares can be transferred without the consent of the other shareholders, but the transferee must be elected to membership before he can

have a voice in the affairs of the partnership. If he is not elected to membership, he can demand that he be paid the value of his share from the partnership assets. Like a corporation, articles of association must be filed to give notice to the public. If all formalities are complied with, the shareholders are not personally liable to creditors. This limitation of liability holds only in the state of organization. In foreign jurisdictions, the shareholders may be held as general partners. The association operates through a board, like the board of directors of a corporation. It thus gets the advantages of delegated and centralized authority. However, it has little to commend it. The formal organization process, restrictions, and taxes have little advantage over those applying to the corporation. On the other hand, the lack of status outside the state of organization is a distinct disadvantage. This type of organization is seldom used.

Pennsylvania Statute.—The following excerpts are from the Pennsylvania statute.

SEC. 241. PARTNERSHIPS WITH LIMITED LIABILITY OF ALL PARTNERS; PURPOSE. Where two or more persons may desire to associate themselves in partnership for the purpose of conducting any kind or kinds of business, trade, or occupation, . . . and may desire to limit the liability of all of the partners for the debts of the partnership to the amount of capital subscribed by such partners, respectively, it shall and may be lawful to do so, in the manner following, to wit:

SEC. 242. ARTICLES OF PARTNERSHIP; RECORD; AMENDMENTS. . . . Such articles of partnership shall be acknowledged before some officer competent to take the acknowledgment of deeds, and shall be recorded in the office of the recorder of deeds of the county in which is located the place designated as the principal office or place of business. . . . A copy of said articles of partnership, and of all amendments thereto, duly certified by the recorder of deeds, shall also be filed, within thirty days after the recording of said articles or amendments in said recorder's office, in the office of the Secretary of the Commonwealth.

SEC. 244. NOTICE TO BE PUBLISHED; CONTENTS. Notice of the formation of the partnership shall be published in a newspaper of

general circulation in the county wherein is located the place designated as the principal office or place of business. . . .

SEC. 245. "REGISTERED" TO BE ADDED TO NAME. To the name of the partnership shall be added the word "Registered."

SEC. 261. LIABILITY OF MEMBERS; RIGHT TO TRANSACT BUSINESS. No member of any such partnership, thus formed, recorded, and published, shall be liable for its debts. . . .

SEC. 265. LIST OF PARTNERS TO BE POSTED.

SEC. 266. "LIMITED LIABILITY" TO FOLLOW NAMES OF PARTNERS.

SEC. 269. NATURE OF INTEREST IN PARTNERSHIP; TRANSFER; RIGHTS OF TRANSFEREE. Interest in said partnership shall be personal estate, and may be transferred. . . .

SEC. 270. TRANSFEREE ENTITLED TO BOOK VALUE OF INTEREST ACQUIRED. And any change of ownership, whether by sale, death, bankruptcy or otherwise, which shall occur in the absence of such rules and regulations, and which shall not be followed by election to membership, shall entitle the owner or transferee to the book value of the interest so acquired, as ascertained and fixed, as hereinafter provided, at the last period preceding the date at which the member parted with or lost his interest, with interest from such date.

Joint Venture.—The joint venture is an association of individuals for a special transaction. The members have unlimited liability for the association's debts as in the partnership, but the organization operates through a manager who binds the other members. The members are not agents of each other as in the general partnership. Although this type of organization can be constituted without written articles of association, it is better, and the usual practice is to set up a written agreement among the parties. The association ceases on completion of the transaction for which it was organized. The chief disadvantage of this form of organization is the unlimited liability of the participants.

Joint Stock Company.—The joint stock company closely assimilates the corporation. However, it is not a statutory organization; so it has no charter from the state. But it does

have articles of association similar to the corporation charter. The participants set up the articles by contract among themselves. The association is managed by a board of directors and has transferrable shares. The amount of stock can be increased or decreased and shifted from person to person without affecting the continuity of the organization. Its mode of operation is similar to that of the corporation. However, the shareholders have unlimited liability for the debts of the enterprise. This is the chief disadvantage of this type of organization. It can be partially overcome by inserting in each contract a clause stating that the contractee shall look only to the assets of the association for satisfaction. Since this is a term of the contract, it protects the shareholder from liability. However, non-contractual obligations, such as tort liabilities, cannot be guarded against in this way. In most cases, the extra protection afforded by the corporation is worth the extra red tape and expense. The joint stock company is usually taxed as a corporation.

Business Trust.—The terms *business trust* and *Massachusetts trust* are used interchangeably. The business trust is frequently called the Massachusetts trust because this type of organization got its greatest development in Massachusetts. In any trust, there are three parties and a res. The *res* is the thing that is held in trust: in the case of the business trust, the assets of the business. The parties are the settlor or donor, i.e., the person or persons who turn the property over to the trustee or trustees; the trustee or trustees, who hold and manage the property (in the business trust, the trustees correspond to the board of directors in a corporation); and the settees or beneficiaries, who are to receive the fruits of the trust (the shareholders in the business trust). The trust is an old device. It was used for centuries in dealing with real property. It has been adapted to the business field, in order to get a common law type of organization that will give the advantages of incorporation. The usual business trust has a deed of trust which resembles very closely the charter of a corporation. It sets up an operating structure under which the trustees func-

tion like a board of directors. Their powers and duties in the transaction of business are defined as in a corporation charter. Provision is made for the designation of a president, vice-presidents, secretary, and treasurer. The beneficial interest in the trust is represented by shares of stock similar to the shares of stock in corporations. Indeed, many people hold shares of trusts and do not realize that they are not shares of corporations. The trustees frequently issue bonds against the business enterprise that they hold in trust. Hence, the balance sheet of the enterprise is not readily distinguishable from that of a corporation. Legally, the settlor and the beneficiary may be the same person. So it is customary in organizing a trust to sell shares of beneficial interest, in order to raise funds for the business. In all matters, the trust closely approximates the corporation. However, there are marked differences between the status of directors and trustees, and between stockholders in a corporation and shareholders in a trust. In the corporation, the directors are elected periodically and represent the shareholders in the conduct of the corporate business. In the trust, the trustees are appointed for the duration of the trust (usually a long period of years) and cannot be controlled by the shareholders. In the corporation, the shareholders may control the affairs of the business by their power to vote for new directors, if the business is not conducted to suit them. In the trust, the shareholders cannot elect trustees annually, but must grin and bear unsatisfactory management until the trust is terminated, or until management becomes so grossly incompetent that a court will interfere. This is the fundamental weakness in the trust—the shareholders cannot elect trustees periodically. Although, as a general rule, corporate managements hold office for long periods and corporate shareholders are not particularly conscientious in exercising their voting privileges, the ability to vote, in case circumstances require it, is always good insurance against bad quality management.

The trust has been used chiefly to circumvent restrictions on corporations. If statutes forbid corporations to hold land or stock in other corporations, but do not define the term

corporation to include trusts, it is a simple matter to organize a trust and defeat the purposes of the statute. Thus prior to 1912, Massachusetts forbade corporations to hold land. Trusts were organized for this purpose. Because of the large development of trusts and the law of trusts in this connection, the business trust became known as the Massachusetts' trust. Massachusetts also forbade corporations to hold more than 10% of the stock of a local public utility corporation under penalty of having the local public utility dissolved. Hence, public utility holding corporation systems seeking to enter Massachusetts organized trusts as sub-holding companies, thereby organizing the industry along the lines pursued in other states. It will be noted that this type of use comes largely from faulty draftmanship of statutes. Since it is a comparatively easy thing to amend a statute in such a way as to broaden the definition of corporation to include business trusts, these uses of the trust are fast disappearing. In those cases where the loophole continues, it may be said that the policy of the statute itself is in doubt. If the policy of the statute is doubted, little effort will be made to plug it. As was noted, Massachusetts finally gave corporations the power to hold real property, instead of eliminating the trust subterfuge. So much of the legislation interfering with business organization is of doubtful wisdom that the laws are frequently left as originally framed. Since the passion which occasioned them has subsided, there is no political reason for stirring up the situation again, even though the laws are largely defeated. However, in those cases in which abuse is great, the law is usually plugged quickly.

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CHAPTER 3

ORGANIZING AND MANAGING THE CORPORATION

The Franchise.—As was stated in the preceding chapter, the corporation is created by the state. The legislature of the state passes statutes fixing the rights, powers, and duties of corporations. The individuals interested in forming a corporation frame a charter which complies with the appropriate statute and file it in a state office, usually in the office of the secretary of state. In some states, the charter must also be filed in county recording offices. In some, it must also be approved by the attorney general or another officer. However, when these formalities have been complied with, the corporation comes into being. The right of the association to exist as a separate legal person is called a franchise, the right *to be*. The corporation must also have the right to perform its functions. This has been called "the right to do." In addition, it may be granted special privileges, e.g., the right to place gas mains under the streets. These are called special franchises. The necessity of separating the franchise *to be* from the franchise *to do* lies chiefly in the problems of our federal system of government. Ordinarily, the state of incorporation gives both the right to exist and the right to exercise functions at the same time. However, the author has seen a copy of an old charter in which the State of Maryland gave outrageously broad powers to a corporation, but specified that the corporation should not transact business in Maryland. Those days are probably gone forever, but still the states charter corporations which will transact part or all of their business in other states. Consequently, the other states must exercise some control over these legal individuals. Hence, as a matter of comity, foreign states recognize the existence of the corporation, but place restrictions on them. They force the foreign corporations to

comply with these restrictions before transacting business within their borders. This process regulates corporations, but still gives incorporators a choice of states. So in any incorporation, the promoters usually first study the advantages of the laws of different states and form the corporation in the state giving the greatest advantages. These advantages include limitation of taxes, freedom from making reports, liberal powers, and a host of other considerations. After incorporation, the company can be qualified to do business in such other states as seem desirable.

Charter.—The certificate of incorporation is usually referred to as the charter. This designation is correct, so far as it goes. However, the certificate must be read in conjunction with the statutes and constitutions upon which it is founded. Legislatures cannot grant powers not authorized by the constitution; nor can government officials give greater powers than those authorized by the statutes. If any conflict in provisions arises, the constitution will prevail over the statutes, and the statutes will prevail over the certificate of incorporation. Further, the corporation or its shareholders may have powers not specified in the certificate because such powers are conferred on all corporations of the particular class or on all stockholders by constitutional or statutory provisions. Therefore, the complete charter of a corporation is said to consist of the Constitution of the United States, federal statutes passed pursuant to the constitution, the state constitution, statutes passed pursuant to the state constitution, and the certificate of incorporation.

Certificate of Incorporation.—The certificate of incorporation is the articles of association drawn up by the organizers of the corporation and filed with the secretary of state (or other designated officer). It is the constitution of the corporation. It is a contract between the security holders and the corporation, between the corporation and the state, and between the security holders *inter se*. It defines the powers of the corporation and of its officers and directors. It also specifies what stockholders shall control and how they shall exercise

their control. The ordinary certificate of incorporation covers the following points:

1. Name of corporation
2. Purposes (types of business) of the corporation
3. Number of shares and their par value if any
4. Location of office of the corporation
5. Duration of the corporation
6. Number of directors and their qualifications
7. Names and addresses of directors until first annual meeting of stockholders
8. Names and addresses of subscribers to certificate of incorporation and the number of shares subscribed
9. That subscribers are of legal age and that the required proportion are citizens of the United States
10. Designation of Secretary of State as agent for service of process

By-Laws.—In addition to the items covered by the certificate of incorporation, the stockholders (in some cases the statute or charter delegates this power to the directors) at their first meeting set up a body of rules for the conduct of the corporation. These rules cover the location of offices and places for the transaction of business, the calling of annual and special meetings of stockholders, forms of notice of meetings, the number constituting a quorum, methods of voting, the number of directors, forms of notice for directors' meetings, designation of officers and their functions, routine for issuing securities, times for dividend action, definition of fiscal year, provisions for amendments, etc. This body of rules is known as the by-laws. They, together with the certificate of incorporation, constitute the operating plan of the enterprise.

Board of Directors.—The final authority in the management of a corporation is lodged in the board of directors. The board is composed of a group of men elected by the stockholders to conduct the affairs of the corporation. Usually these are elected annually. During their terms of office, the directors are beyond the control of the stockholders. Stockholders can-

not compel them to put particular policies into effect, nor to carry out policies that they promised to carry out when elected. The directors are free to exercise their own judgment. However, as a matter of practice, the directors are subject to pressure. They know perfectly well that they will not be re-elected if they fail to act as the majority of stockholders wish them to. Further, the by-laws of most corporations make provision for the calling of special stockholder meetings at the instance of stockholders, and for increases or decreases in the size of the board of directors. If the policy problem is sufficiently important, the stockholders can increase the size of the board and add enough new members to swing the vote in their favor. This method is occasionally resorted to when a new group purchases majority control of a corporation.

The board of directors usually selects the officers of the corporation. The officers, particularly the president, are charged with the execution of the policies determined by the board. The officers may have a large share in formulating the policies of the corporation, but the ultimate power to approve or disapprove rests with the board.

Committees of the Board.—The board of directors normally contains a number of men who are primarily interested in other affairs. These men are necessary to the corporation in order to give its affairs the benefits of widened contacts and different slants on business conditions. But since these men cannot devote all their time to its affairs, they must be relieved of some of the burdens of the directorate. This result is accomplished by dividing the board into committees which devote much of their time to special phases of the company's business. The purposes of the special committees will vary with the problems of the enterprise. There may be a finance committee, an executive committee, a proxy committee, a loan and discount committee (in the bank), etc. These committees handle the tasks assigned to them and periodically report to the full board for action, or for confirmation of action already taken. In this way, a vast amount of study can be devoted to individual policies without exhausting the time of the entire directorate.

Liability of Directors.—Directors must exercise ordinary prudence in the conduct of the affairs of a corporation. If their negligence causes losses to the corporation, suit can be brought against them for the benefit of the corporation. They are allowed a wide range of discretion and cannot be made to suffer for losses traceable to ordinary errors of judgment; but they are not permitted to neglect business seriously, and then leave the shareholder to shoulder the loss. That they are liable in cases of negligence is clear, but the question of what constitutes negligence in a given situation is hard to define. The decisions handed down by different courts are very irregular. Bank directors can be held a little more effectively than can the directors of other types of corporations; but this condition is probably traceable to the fact that banking regulations, reports, and examinations make it easier for the interested parties to assemble the proof necessary to fix the liability. However, the present tendency is to fix directors' liabilities more definitely. It is likely that new legislation and litigation will gradually clarify the position and responsibilities that directors assume.

Stockholders.—The stockholders stand in about the same position with reference to the corporation that the citizens stand in with reference to city, state, or national government. Those that are given the right to vote by the charter of the corporation can cast their votes for directors. The machine in control of the management of the corporation may succeed through its proxy committee in intrenching the particular management, much in the same way that a Tammany machine in New York, a Kelley machine in Chicago, or a Farley machine in the national capital intrench themselves. However, if the stockholders make common cause, they can oust the management. If necessary, they can amend the charter and by-laws in order to do so. Ultimately, they can bring the organization under control.

As the owners of the corporation, the stockholders are especially interested in the efficient conduct of the business. Hence, at common law they had large powers of inspecting the records

of the business. These powers to inspect accounting records have in some cases now been limited by statute. In most cases, however, the stockholder is refused a right which he legally possesses. The management merely refuses him the right to inspect. The stockholder is then left to enforce his demands in court, and the legal costs and inconvenience deter him from going further. In the latter case, he relies on the financial statements issued from time to time to regulatory authorities, exchanges, and the stockholders. These give him as much of a picture of the financial affairs as the general investing public usually possesses. A certain number of these reports are usually prescribed by by-laws and are issued regularly.

The stock records are always open to the stockholders so that they may determine who holds the shares of the corporation. This information is essential if a stockholder wishes to correspond with other stockholders for the purpose of getting votes with which to oust the management. Seldom is a stockholder obliged to resort to court procedure to obtain access to these records.

Amendments to the Certificate of Incorporation.—From time to time, the charter of the corporation will have to be adapted to meet changed conditions. A severe depression may have wiped out assets back of the capital stock, thus creating a deficit. The directors may see an advantage in cutting down the stated value of the capital stock to correspond with the reduced amount of assets. In this case, the stockholders may vote to change the par value of their shares from \$100 to \$50, or to some other value. In this way, the deficiency of assets is wiped out by reducing the offsetting stock item. In other cases, the business may need to sell more stock for expansion. Under these circumstances, the stockholders may authorize an increase in the stock of the corporation. In such cases, an amendment to the charter is voted on at a special meeting of the stockholders and then is filed with the secretary of state.

Fundamental Changes in the Organization.—The stockholders enter into their relationship with the corporation with the understanding that it will prosecute the purposes set forth

in the charter. If the business is to be dissolved or merged or amalgamated with that of another corporation, the change is so marked that the stockholders must ratify it. As will be explained later, unless the statutes of the state or the charter permit a less number to ratify, all the shareholders must be in favor of the merger, amalgamation, or sale of the total assets of a corporation before such action can be validly taken. In the case of dissolution when the business is prospering, unanimous consent is likewise required. But if the business is failing, a majority of the shares can approve its dissolution. In some states, the properties cannot be mortgaged without the consent of a majority of the stockholders; but in most states, the directors have the same power to borrow money and mortgage properties which the directors exercised at common law. However, even though the statutes do not restrict the directors in the issuing of bonds and the creation of mortgages, the stockholders may take away this power by charter or by-law provisions.

Protection of Dissenters.—In case statutes permit a majority of the stock to ratify a merger, amalgamation, or other fundamental change in the character or charter of the corporation, including stock provisions, they usually provide some relief for the dissenting minority. Usually the dissenters are permitted to have their stock appraised and purchased by the corporation. The provisions of the New York statute illustrate:

SEC. 21. RIGHTS OF NON-CONSENTING STOCKHOLDERS OF THE CORPORATION ON VOLUNTARY SALE OF FRANCHISE AND PROPERTY. If any stockholder not voting in favor of such proposed sale or conveyance shall at such meeting, or within twenty days thereafter, object to such sale, and demand payment for his shares, such stockholder or the corporation may, within sixty days after such meeting, apply to the supreme court at any special term thereof held in the district in which the office of such corporation is situated, upon eight days' notice, for the appointment of three persons to appraise the value of such stock, and the court shall appoint three such appraisers, and designate the time and place of their first meeting, with such directions in regard to their proceedings as shall be deemed proper, and also direct the manner in which payment for such stock shall be made

to such stockholder. The court may fill any vacancy in the board of appraisers occurring by refusal or neglect to serve or otherwise. The appraisers shall meet at the time and place designated, and after being duly sworn honestly and faithfully to discharge their duties, they or any two of them shall estimate and certify the value of such stock at the time of such dissent, and deliver one copy of their appraisal to such corporation, and another to such stockholder if demanded by him. The charges and expenses of the appraisers shall be paid by the corporation. When the corporation shall have paid the amount of such appraisal, as directed by the court, such stockholder shall cease to have any interest in such stock and in the corporate property of such corporation and such stock may be held or disposed of by such corporation. Before receiving payment such stockholder shall surrender his certificate of stock.

However, appraisal provisions are not universal. In Michigan, for example, if the required procedure is observed, the dissenting stockholder must go along with the majority. The accompanying table contains a list of those states which make provision for the appraisal of dissenters' shares.

PROVISION FOR APPRAISAL OF STOCK OF DISSENTING SHAREHOLDERS IN CASE OF AMALGAMATION, MERGER, OR SALE OF ASSETS

Statutory Provision	State
"Market value"	Alabama, New Jersey, Pennsylvania
"Fair cash value"	Arkansas, Florida, Louisiana, Minnesota, Nevada, Ohio, Virginia
"Fair value"	Maryland, Rhode Island, Tennessee
"Fair value" as determined by practice and procedure under eminent domain laws	Illinois, Indiana
"Fair value" based on pro rata share of value of corporate assets	Oregon
"Value"	Connecticut, Delaware, Idaho, Massachusetts, Missouri, North Carolina, New York, Philippine Islands, Vermont
"Market value" but not less than book value according to last balance sheet	Kentucky, New Mexico

It will be noted that the statutes provide for the determination of several kinds of value. The dissenting stockholder is, therefore, obliged to determine what is meant by the statute from the decisions of the courts of the particular state. So far, the courts have given little more than an indication as to how values other than market value are to be arrived at; and thus great uncertainty as to treatment to be expected faces the dissenter.

Method of Voting.—At common law, each shareholder had one vote in corporate meetings, regardless of the number of shares he held. This method of voting failed to give control in proportion to capital supplied, and hence tended to make control fail to correspond to risks taken. Consequently, the method of voting was changed by corporation laws. These generally permit each share of stock to have a proportionate vote. However, the statutes are usually very flexible in permitting the individual corporation to set up its own voting structure. Many of the states permit the corporation to issue non-voting stock or to provide for cumulative voting. Others are more rigid and require that all stock, whether preferred or common, shall have one vote per share.

When each stockholder has one vote, regardless of stock holdings, the method of voting is called common law voting. Since the other methods of voting are founded on statutes, they are designated as statutory voting. Hence, when the phrase *statutory voting* is used, it signifies a form of voting in which votes vary with the number of shares held. Cumulative voting refers to a particular form of voting in which each share is given a total number of votes equal to the number of directors to be voted for. These votes can then be voted in any way the holder sees fit to apportion them. He can vote all votes for one director; he can give one vote per share (assuming that the share carries one vote) for each director; or he can apportion his votes in any combination between these extremes. It was necessary to qualify the statement by inserting the limitation, assuming that the share carries one vote, because shares may not carry full votes. For example, Cities

Service Company common stock carries only one-twentieth of a vote per share. Cumulative voting merely provides for the concentration of whatever votes the shares carry. For convenience of discussion, it is assumed that each share carries one vote.

The purpose of cumulative voting is to permit the minority stockholders to concentrate their votes on a limited number of directors and thus get representation on the board of directors. It is felt that interests of the minority will be better safeguarded, if they have a representative watching the affairs of the corporation from the inside. The board of directors can still operate chiefly through committees and thereby keep the minority representation partially in the dark as to many of the activities of the corporation; but a member of the board of directors has a right of access to all records and can inform himself in a general way though he does not participate in the inner workings of the committees. Most management abuses occur behind a veil of secrecy. Cumulative voting tends to lift this veil and hence to limit the abuses.

The minority group frequently desires to know just how many directors it can be sure of electing. The number can be determined by a standard formula. This formula is as follows: divide the total number of votes to be cast at the meeting by the number of directors plus one. This gives the basic figure from which all computations are made. To insure election of one or more directors, the minority must hold the number of votes indicated by this computation for each director to be elected plus one additional vote.

$$\frac{\text{Total number of votes to be cast}}{\text{Number of directors} + 1} + 1$$

For example, suppose that 100,000 shares will be voted at the meeting of Company X and that nine directors are to be elected. Since each share has one vote per director, 900,000 votes will be cast. Dividing 900,000 by 10 (the number of directors plus one), we get 90,000 votes as the basic working figure. One additional vote will permit election of any number of directors for whom we have 90,000 votes each. Thus,

90,001 votes will elect one director; 180,001 votes will elect two directors; 270,001 votes will elect three; and so on. It should be noted that we add only one vote, regardless of the number of directors to be elected. That vote, when taken away from the opposition and added to the minority total, always constitutes the margin by which the minority can win. (The student can demonstrate this method by any combination of votes and directors.) By comparing the number of votes held with the number required to elect a director, the minority can use this formula to determine how many directors it can elect at any given meeting. To illustrate, if the minority in the above case has 99,000 votes, it knows that it is in the same position. If it has 81,000 votes, it must purchase additional shares or obtain proxies to round out the total of 90,001, provided it desires representation at all.

Proxy.—The stockholder may attend shareholder meetings to vote his stock, or he may be represented by some other person. This other person is known as a proxy. The stockholder gives his representative a written authorization to vote the shares. Consequently, the written authorization has also come to be known as a proxy. Proxy voting is provided for by the statutes under which the corporation is organized. Proxies cannot be given perpetually and are usually given anew for each meeting of the stockholders. The stockholder can appear at meetings and revoke a proxy that he has previously given. In other words, he can always change his mind up to the time of voting and give his vote to a different faction or cause. The proxy is primarily a device of the management for getting out a sufficient vote to transact corporate business. The by-laws usually specify a form of proxy to be used. The directors set up a proxy committee from their number, and this committee sees that proxy forms are sent to the shareholders along with announcements of meetings. The shareholder is encouraged to sign and return these proxies to the encumbent management. At most corporate meetings, the secretary of the corporation will cast nearly all of the votes cast. This follows because he is designated by the management to vote the proxies returned to the corporation.

Pooling Agreements.—Stockholders sometimes enter into agreements with each other to vote their shares as a block in favor of a certain policy. These agreements are valid and legally enforceable if for a legal purpose. If they are for an illegal purpose, for example, for the violation of anti-trust laws, they are unenforceable. Courts enforce them by construing the contract as a proxy and permitting the authorized party to vote the shares accordingly. The holder of the contract is said to have a power coupled with an interest so that the power to vote the stock cannot be revoked.

Voting Trusts.—The voting trust is a device to insure that voting control shall be lodged in the hands of a particular group for a specified period of time. The interested group draws up a deed of trust and designates the trustees. The shareholders then are asked to turn their shares over to the trustees to be held in trust for the shareholders' accounts. The trustees issue voting trust certificates to the shareholders. These certificates indicate the number of shares held in trust for the certificate holder. Since the trustees now have title to the shares of stock in the corporation, they vote for directors and exercise all powers formerly exercised by the certificate holders. However, the deed of trust usually provides that the trustees shall pay all dividend receipts immediately to the certificate holders in the trust. On termination of the trust, the shares of stock in the corporation are distributed to the certificate holders of the trust. Courts of some states held the voting trust illegal because it separated voting power from the actual economic interest in the corporation; courts of other states held the voting trust legal. A substantial number of states specifically permit the voting trust by statute; but many of these limit the duration of such trusts to five years. Of course, no state will permit a voting trust to be used for an illegal purpose. Conceding a legal purpose, the voting trust is legal in most jurisdictions. The voting trust has been used extensively in reorganizations to insure that the management will remain in strong hands until the corporations have been put back on their feet. It has also been used in anti-trust litigation by agreement with the federal government. In these cases, a

corporation holding control of another corporation, in violation of the anti-trust laws, agrees to place that control in the hands of a neutral party as a condition of settling the suit. The court will then designate a trustee to hold the stock for the account of the previous owner; but since the trustee is now the record owner, the previous owner cannot vote in elections and control the management. Another use of the trust is to prevent outside parties from taking control. If the stock is lodged in a trust for five years, the outsider cannot purchase it and obtain control.

Holding Corporations.—Holding corporations, like voting trusts, can be used to concentrate voting control of one or more other corporations. Holding corporations are corporations which are empowered to own securities of other corporations. This power, like other corporate powers, must be definitely granted by the state of incorporation. In some states, the power is granted to all corporations organized under the state's statutes; in others, it is restricted to such corporations as include the power among their charter provisions. In most cases, corporation laws make no distinction between types of securities in granting the privilege of holding securities of other corporations. Thus, the New York law gives the right to "purchase, acquire, hold and dispose of the stocks, bonds and other evidences of indebtedness of any corporation, domestic or foreign." In some cases, however, provisions deal specifically with the holding of stock. Such are the provisions in the Vermont law.

The latter type of provision reflects the fact that it is the privilege of holding the voting stocks of other corporations that is of greatest economic significance and that has attracted the most discussion and investigation. On this account, some writers prefer to restrict the term "holding corporation" to those corporations which hold voting stocks of other corporations. This attempt to narrow the meaning of the term is well taken. Nevertheless, in view of the fact that the right to hold all types of securities is essential to the proper performance even of control company functions, it would seem that the

term should be used in its broad significance, that is, the holding of securities in general. If the term be so used, special meanings can be covered by special terms. The following chapter discusses holding corporations in detail.

Interlocking Directorates.—When a person serves as a director in two or more corporations, the boards of directors are said to be "interlocked." That is, each board has a member who can advise it with full knowledge of the transactions of the other board or boards. The common member does not necessarily disclose information concerning the actions of another board, but he does act with such information influencing his conduct. Non-disclosure would be the rule in cases in which the businesses are separate. However, interlocking directorates are most common and most complete among companies which represent related undertakings of unified financial interests. In these cases, complete disclosure of the actions of another board would be common. Thus, the large railroad, industrial, and public utility systems frequently elect the same men to the directorates of several of their subsidiaries. The federal government carries this practice to even greater extremes than does private business. For example, Congress has provided that the board of directors of each Federal Land Bank shall be, *ex officio,* the board of directors of the Federal Intermediate Credit Bank, of the Production Credit Corporation, and of the Bank for Cooperatives for the Federal Land Bank district. This method of organization permits a single group of men to dictate the policies of these four great agricultural credit institutions as though they were but a single bank. The same men, sitting in the same room, examine the same information and arrive at the same general conclusions for the business policies of all the separate banks under them. Although separate minutes must be kept of meetings of separate boards, a determination once made is put through successive board meetings as a matter of routine. Frequently, in private enterprise, the board may act for several controlled companies in a single sitting, directing that the action be entered in the minutes of each company.

Record Dates.—Shares of stock of corporations are bought and sold regularly in the markets. When meetings of shareholders are held, it is necessary to know who are shareholders entitled to vote and who are not. When dividends are paid, it is necessary for the corporation to know who is entitled to them. A large corporation may require several days to compile lists of shareholders. Consequently, shares may change hands after the list has been compiled. In order to avoid confusion and litigation over dividend and voting rights, the corporation usually fixes a date as of which the stockholder lists will be compiled. Only those persons who are registered as stockholders on the stated date can vote or receive dividends. For example, the directors of a corporation may meet as of June 5 and declare a dividend payable on July 15 to stockholders of record on June 30. Announcement of the action on June 5 permits purchasers and sellers of stock to act in the light of the dividend to be paid. Fixing the record date at June 30 serves notice on holders of shares which have not been transferred to have them transferred to their names by June 30. Setting the day of payment at July 15 gives the company 15 days to compile the stockholder lists and prepare the dividend checks.

Ultra Vires Acts.—The corporation can exercise only such powers as are granted to it by the state. However, the grant of powers is both express and implied. That is, the courts uphold the corporation in the exercise of powers beyond the expressly stated charter provisions provided those powers are incidental to, or reasonably necessary or convenient for, furthering the expressed purposes of the corporation. Both the expressed and implied powers are very broad today. Charters are granted which give corporations great latitude in engaging in multiple lines of business. Courts have also been very liberal in their interpretations of implied powers. As a result of these liberalizing tendencies the subject of *ultra vires* acts (acts beyond the corporate powers) assumes less importance today than it did a few decades ago. Indeed, one New York judge has written that, "In these days . . . it would be difficult to say that any business act is not within the power of a business corporation."

Nevertheless, the subject of ultra vires acts is still important. Banking, insurance, and public utility corporations are usually more carefully restricted in their powers than are other types of corporations. Consequently, the problem of ultra vires acts is still definitely important in those fields. Further, even granting the laxity of incorporation laws, the general business corporation cannot legally violate express prohibitions of the statutes or of its charter; nor can it stretch its implied powers indefinitely. It, too, may be guilty of ultra vires acts.

When a corporation exceeds its powers, the state may always proceed against it to forfeit its charter or to enjoin the illegal activities. The stockholder may also bring suit against the corporation to confine its business to the limits of its charter. In fact, he may find such a suit necessary to protect his interests although the attorney general of the state is not interested in filing a suit on behalf of the state. Such an occasion frequently arises when the acts of the corporation entail severe financial risks.

Parties to an ultra vires contract may also raise the issue. In contract cases, courts refuse to enforce the ultra vires agreement if neither party has yet performed. If both have performed, the courts refuse to reopen the transaction, leaving the parties where they stand. If one party has performed, the courts in most states force the other party to fulfill his part of the bargain.

Violations of by-laws are not technically *ultra vires* acts according to the better usage of that phrase, but some authors classify them as such. Nevertheless, stockholders can enjoin them in the same way that they can enjoin ultra vires acts.

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CHAPTER 4

THE HOLDING CORPORATION

Function.—The function of the holding corporation is to unite several corporations into a single financial unit without destroying the existence of the separate corporations. This financial unity could be obtained by having a single corporation own all of the properties directly were it not for the fact that many governmental restrictions, financial risks, business risks, and statutes make it necessary or desirable to have the different properties owned by separate operating corporations. Most of the factors which cause the separation of the different properties operate in conjunction with each other, but they can be isolated for purposes of discussion. The following sections discuss some of the more prominent causes of separate incorporation of the parts of a larger business. Historically, there have been many other important causes of separate incorporation of these parts of a business. These were largely matters of evading tax laws and other public restrictions of a rather fundamental character. Because of the extreme importance of these restrictions, the loopholes which permitted holding companies to avoid them were plugged. Although some of the loopholes remain, it does not seem worth while to dwell on the less defensible uses of the holding company structure.

Segregation of Business Risks.—Many corporations engage in a variety of types of business. Each of these types has characteristics of its own and is subjected to risks peculiar to it. Hence, the securities of a corporation having interests in several types of businesses necessarily represent a variety of risks. The presence of a variety of risk factors in securities frequently tends to make it more difficult to sell those securities. For example, during the teens and twenties, the electric railway industry had very poor credit, while the electric power

and light industry had very good credit. If these risks were combined in a single security, the cost of securing money, even for purely electric power purposes, was thereby increased. Not only does this general statement hold true when a single security represents electric railway risks and electric power and light risks, but it is also true when a single security represents natural gas and/or oil risks and electric light and power risks, or a variety of railroad or industrial risks.

The problem of economically financing these different classes of risks has engaged the attention of financial executives for years. It has usually been solved by employing the holding company device. In all cases, the first step is to finance separately the different lines of business by segregating the various types into separate operating companies. The securities of each company then represent a single type of risk. This method is discussed more fully in the chapter on segregated risk financing.

Evasion of Discriminatory Foreign Corporation Laws.—State laws frequently discriminate between domestic and foreign corporations. As already indicated, certain types of businesses may be conducted only by domestic corporations. Aside from direct prohibitions of this nature, obstacles of a lesser nature are presented to the foreign corporation. Two of the more important of these are heavier taxation and the necessity of making burdensome reports. The matter of discriminatory taxation is a familiar fact to students of this subject, but the extent of burdensome reporting is little noted. Space will not permit a detailed statement of the nature of the required reports, but requirements with reference to the one item of real estate will serve as an indication. With reference to this item, H. A. Haring presents the situation as follows:

> about one-third of the States demand of foreign corporations in the annual report a detailed schedule of real estate acquired and disposed of during the preceding twelve months. Occasionally this is supplemented by requiring a complete inventory of all real estate holdings at the close of the year.[1]

[1] *Corporations Doing Business in Other States*, New York: The Ronald Press Co., 1927, p. 73.

When the tax and report requirements for foreign corporations are heavier than those imposed upon domestic corporations, the formation of a domestic subsidiary is an obvious means of escape.

Another factor, which may be conveniently noted here, is the effect of restrictions on the use of public highways and on the power to condemn property. In many states, franchises to operate on the public highways cannot be exercised except by domestic corporations. In other states, the provisions of such franchises are often made so burdensome in the case of foreign corporations that domestic incorporation is desirable. Moreover, practically all local utilities must at one time or another exercise the power of eminent domain. This is especially true of electric, gas, and telephone companies in which the growth factor is rapid. Hence, since in most, if not all, states no corporation foreign to that state can exercise the power of condemnation, this factor is a strong inducement to domestic incorporation.

Access to Foreign Money Markets.—A use of the holding company which has attracted little attention is that of gaining access to foreign money markets. The ordinary procedure is to incorporate a holding company in the country where funds are to be raised. This company then sells securities, the proceeds of which are used in developing properties in foreign lands. The advantages of this arrangement lie chiefly in the fact that the investor will accept a smaller return on domestic securities, other things being equal, than he will accept on foreign securities. In distinguishing domestic and foreign investments, the investor tends frequently to look to the place of incorporation rather than to the location of the underlying corporate properties. In some cases, the investor considers that the domestic public utility holding corporation doing business in a foreign land is likely to be more profitable than a corporation doing a domestic business because of the absence of profits regulation in many foreign countries. Because of this attitude, he will pay a high price for the securities of the domestic holding corporation controlling foreign properties, when

he will pay only a low price for the securities of a foreign company in essentially the same circumstances. This problem of foreign investment has been approached from a different angle by the investment trusts which invest substantially in foreign securities; but in both cases, capital has been secured in domestic markets for foreign employment; and the capital has been obtained on more favorable terms than it could have been obtained on, had the foreign securities been sold directly.

Evasion of Financing and Franchise Obstacles to Consolidation.—The holding company device is used to effect consolidations when financing or franchise obstacles prevent consolidation by direct ownership of the properties. Financing obstacles are usually the result of outstanding indebtedness. Provisions in bond issues are often such as to make the redemption of outstanding bonds necessary in case direct property owning consolidations are formed. This was true in the case of the Pennsylvania Edison Company and the Metropolitan Edison Company, where the provisions of the mortgage of the former necessitated, in case of the merger, the retirement of the entire issue of its bonds at an expense which would offset any advantage to be gained by financially uniting the two. In other cases, redemption is required in order to release securities pledged under a collateral trust bond or note issue. When an impeding bond issue is not callable a very great obstacle arises, since the bondholders are in a position to demand their own terms. Employment of the holding corporation device is an obvious solution to this class of problems.

Charter and franchise obstacles to consolidation by direct ownership of properties arise principally because of changed corporation laws. Many charters granting valuable privileges and exemptions are in existence today which a present day legislature would be unwilling or powerless to reenact. Corporations possessing these valuable charters are unlikely, therefore, to enter into direct property owning consolidations when the effect of such consolidations would be to remove some or all of these privileges. In other cases, perpetual franchises exist, which would give place to less desirable franchises if the

old corporations were to lose their identities. Another obstacle which sometimes arises is the inability of a company, because of franchise limitations, to operate in territories held by other companies. In such cases, the only avenue of consolidation is that by control of corporations.

Segregation of Regulated Businesses.—While economic reasons have combined to bring many types of businesses under common financial control, the public attitude toward all types has not been the same. Thus public utilities have been subjected to inquisitorial procedures and a measure of social control unknown to competitive business. While industrials have been left particularly free from regulation except for some non-inquisitorial prohibitions, public utilities have been subjected to positive regulation in a majority of states. In a large number of states, this regulation reaches to a scrutiny and control of the quality of service rendered, rates charged, accounting records kept, issue of securities, and various lesser factors lying at the very heart of corporate policy.

The effect of this difference in social attitude toward public utilities has been to cause regulated businesses to be conducted by corporations which are separate and distinct from those which conduct non-regulated businesses. In some cases, this segregation has been required by law in order to make control by regulatory commissions more effective. In other cases, segregation has been resorted to voluntarily as a means of putting the details of non-regulated business beyond the scrutiny of public commissions. The latter motive has probably been more effective in shaping holding company structure than legal requirements; for whatever may be the social merits of regulation, business men generally have a profound dislike for governmental interference in the affairs and policies of their corporations. Regulation would not necessitate such voluntary segregation except for the fact that commissions have been given wide inquisitorial powers over non-public utility activities of public utility corporations. The very broad nature of these powers is aptly illustrated by the following excerpts from Chapter 160 of the *Code of Virginia:*

SEC. 4064. Every company operating any public utility in this state shall be deemed a public service corporation within the meaning of the Constitution and the laws of Virginia relating to public service corporations, and as such shall be subject to control of the State Corporation Commission.

SEC. 4067. The term "public utility" as used in this chapter shall mean and embrace every corporation, other than a municipality, and every company, individual, or association of individuals, their lessees, trustees, or receivers, appointed by any court whatsoever, that now or hereafter may own, operate, manage, or control any plant or equipment within the State for the conveyance of telephone or telegraph messages or for the production, transmission, delivery, or furnishing of heat, light, water or power either directly or indirectly to or for the public.

SEC. 4070. The State Corporation Commission, with or without an investigation, may require any public utility to furnish to it in such form, at such times, and in such detail as the commission shall require, such accounts, reports and other information of whatsoever kind or character as it may deem proper and in such form and detail as it may prescribe, in order to show completely the entire operation of the public utility in furnishing the unit of its product or service to the public.

The best way of avoiding commission inquisition of this sort is to have separate corporations conduct the different types of businesses.

Conformance to Regulatory Jurisdictions.—Conformance to regulatory jurisdictions by public utilities has been motivated in part by a desire to avoid coming under federal jurisdiction as an interstate business and in part by the desire or necessity of meeting specific state problems.

The dominating interests in the public utility industries have been greatly opposed to federal regulation. State commissions have likewise been opposed to federal regulation of local public utilities, even though such utilities do an interstate business. This attitude may be ascribed to many causes. The private interests believe that federal regulation would prove less flexible and less subservient to their desires. The state commissions have a natural prejudice against federal encroachment. But

aside from opposition to federal interference, several state commissions feel that most of the regulation must be intrastate regulation and that such regulation can be amply effective only in so far as corporate structures conform to regulatory jurisdictions. In accordance with this attitude, a number of states, e.g., Illinois, require that all public utilities of specified kinds be operated by domestic corporations. In case the statutes so require, the operating public utility corporations must conform to state lines if neighboring states have like requirements. They must do this even though operating and financial factors favor the formation of corporations owning properties in more than one state. Thus, because of "statutory requirements in respect of telephone companies operating in Indiana," the Indiana Bell Telephone Company was incorporated in 1920 to acquire the Central Union and other Bell system property in Indiana.

Limitation of Liability.—Limitation of the liability of shareholders has been considered one of the chief advantages of the corporate form of business organization. The smaller the liability of the stockholder, the greater is the ease of raising funds. Yet the liability of shareholders in all types of corporations organized under all jurisdictions is not the same. Banking corporations have been notorious for the fact that their shareholders were frequently liable, not only to loss of their entire investment, but for a forced contribution equal to the par value of their shares—in Colorado, equal to twice the par value of their shares. Besides this exception to the general condition of single liability of stockholders, the laws of practically every state in the union hold the stockholder liable for unpaid installments.

In order to meet the situation created by statutes which impose legal liability in excess of the amount actually paid in, some persons have organized holding corporations to insulate them from further liability. The device is as follows: A holding corporation is organized under the laws of a state or nation, which limits the liability, attaching to the full-paid shares, to the amount already contributed. The holding cor-

poration then acquires the stock of the corporation whose shares carry liability in excess of the amount already contributed and substitutes its own securities in the hands of individuals. The effect of this process is to make the holding corporation the real stockholder of the company whose shares carry additional liability. If, therefore, the holding company has no assets other than the stock of the single subsidiary, there will be no realizable assets available to satisfy such liability. This device appeared to prevent further liability. However, in some recent bank cases the courts have disregarded the corporate entity of the holding company and have carried the liability through to the stockholders of the holding corporation.

Retention of Executives after Consolidation.—The holding corporation device makes it possible for presidents, vice-presidents, and other officers of previously independent companies to retain their titles and positions in a consolidated enterprise. The problem of titles and positions for influential executives of the constituent companies is always a very difficult one for promoters of consolidations. The new organization must work harmoniously to be successful; and yet, ambitions and jealousies of executives are always present. Therefore, to the extent that the prestige of old positions can be left undisturbed, to that extent the problems of consolidated efficiency are simplified. The advantages to be gained by permitting officers and managers of constituents to retain their old titles were given by Judge Gary as one reason why the United States Steel Corporation was organized as a holding corporation, rather than as a direct property owning consolidation. While this advantage is not a controlling factor in keeping separate corporate entities alive, it is a contributing factor which must be weighed in any plan of consolidation. Able management groups now make much use of employee titles as a device for developing a better *esprit de corps*, but the titles are mostly departmental rather than corporate.

Miscellaneous Uses.—The holding company device is also used to serve a variety of minor purposes. Among these might be mentioned the functions of facilitating profit sharing, ex-

perimentation, manipulation, and concealment of identity. Subsidiaries to facilitate profit sharing have developed chiefly among non-regulated companies. They are exemplified by the Managers Securities Company in the General Motors group. Bell Telephone Laboratories, Inc. is one of the foremost experimental and research institutions in the country. From the standpoint of manipulation, it may be observed that holding companies in the public utility field sometimes have lent themselves as vehicles through which excessive amounts of securities were unloaded on the public for the profit of the promoting interests. Subsidiaries to conceal identity have been used both as predatory instruments and as legitimate vehicles for carrying on system business. As predatory institutions they have developed chiefly as fighting subsidiaries of industrial corporations. As legitimate business vehicles, they have many uses; an example in point is the sale of repossessed electrical appliances in cases in which the parent company does not care to be known as a merchandiser of second-hand goods.

The holding company is also used as a temporary method of consolidation preparatory to the merger or amalgamation of two corporations. If a single corporation purchases control of two or more companies, their policies, managements, and other affairs can be coordinated prior to the actual fusion of the companies. Problems that could not be worked out at arms' length can be handled readily when the companies are controlled by a common financial interest. This use of the holding company is exceedingly wide and important.[2]

Basis of Holding Company Control.—The ordinary basis for controlling a corporation is the voting rights of its capital stock. Consequently, if a single stockholder acquires sufficient stock in a corporation, it can elect a management which will be subservient to its plans for the formulation of corporate policies. The holding company builds up a coordinated system of companies by controlling sufficient stock in two or more companies to determine their policies.

[2] A number of other uses of the holding company are described in detail in articles by the author in the *Journal of Land & Public Utility Economics*, February and May, 1932.

Stock Control for Purposes of Consolidation.—Control for purposes of consolidation is defined as possession of a working majority of the voting shares of a corporation. A concentrated minority of shares may be sufficient to control a corporation under ordinary circumstances; but for the union to be sufficiently binding to be considered a consolidation, the control must be sufficient to weather a dispute over management policies. In case of a thorough test, only a working majority of the voting stock would be sufficiently binding under normal circumstances, and this majority must be held by a single entity. However, recent developments in charter provisions have tended to make this rule less hard and fast than formerly. For example, some of the more recent corporate charters permit the directors to issue additional stock without offering it to the present stockholders. By such provisions, a minority interest, if it controls the directorate of a corporation, may constitute effective consolidation because it can issue enough stock to itself to become a majority interest if its continued control be threatened. Thus, the Electric Bond and Share Company controls the Electric Power and Light Corporation through ownership of a minority of its voting stock, but this minority interest is bolstered up by provisions permitting the directors "to issue any amount of stock to anyone under any terms." [3] However, in lieu of provisions of this character, possession of a working majority of the voting stock of a corporation is necessary to constitute consolidation.

Method of Consolidation by Stock Control.—The method of consolidating corporations by stock control is the same, whether the agency by which the consolidation is effected be an individual, a trust, or a corporation. It is as follows: The voting stocks of the companies to be consolidated are brought under single ownership. The single owner then proceeds to reorganize the managements of the respective subsidiaries. The subsequent quotation from the *New York Times* of April 13, 1928, pictures the usual sequence of events that occurs:

[3] See *United States Daily*, May 8, 1930, p. 13. Even though charter provisions are very broad, courts of equity will prevent sales of stock at unreasonably low prices. Cf. 140 A. 264 (1927).

> Full control of the Stock Quotation Telegraph Company passed to the Western Union Telegraph Company yesterday following the recent acquisition of virtually all the capital stock of the company. . . . The resignation of the former directors and officers has been accepted, and a new board was elected yesterday by the reorganization committee, following which new officers were appointed.

Usually, the new officers and directors are men who occupy like positions in the holding company and/or in other corporations under the same control. Often the separate corporate organizations become mere paper entities, otherwise indistinguishable from the supervisory organization. The same officers, sitting in the same rooms, by the same acts, direct the policies of an entire group of companies. For example, in 1927, Public Service Corporation of New Jersey controlled, directly and/or indirectly, Public Service Electric and Gas Company, Newark Consolidated Gas Company, New Brunswick Light, Heat and Power Company, The Ridgewood Gas Company, and South Jersey Gas, Electric, and Traction Company. These five subsidiaries were operated as a unit by Public Service Electric and Gas Company. They had common officers and directors. The offices of all were in Newark, New Jersey. In short, these corporations were not distinguishable except at law.

Holding Company as a Control Device.—Stock control of two or more corporations may be lodged in the hands of an individual, a trust or a corporation; but because of its decided advantages, the holding corporation is the chief instrumentality for controlling groups of companies. It possesses the same advantages over other types of business organizations with respect to amassing capital to control corporations that the corporation as a business unit possesses with respect to amassing capital for conducting any other business. It is surrounded by few of the legal uncertainties of individual and business trust endeavors. The liability of its stockholders is clearly limited. It can, therefore, sell securities on favorable terms and can mass credit and financial power on a scale which is unapproached by any other type of business organization.

Extent of Holding Company Control among Public Utilities.—In the past, the comparative advantages of the holding-corporation device over other methods of consolidating control of corporations made it an overshadowing factor in the public utility industries. Thus in 1927, the author found that of 189 electric light and power companies with gross earnings of $1,500,000 per year and upwards (the combined capitalization of which represented more than 90% of the industry) 181 were holding companies or subsidiaries of holding companies; four were controlled by Massachusetts trusts; one was affiliated with a Massachusetts trust; and three were apparently independent. Even greater concentration of control was found in the telephone and telegraph industries. The American Telephone and Telegraph Company system alone contains more than 77% of the telephones in the United States and more than 88% of the investment in the telephone industry, while Western Union Telegraph Company dominates the telegraph industry. There is only one other important group in the telegraph industry. That is the Postal system, controlling about one-fourth of the investment. Recent figures are not available for the electric railway and manufactured gas industries; but figures filed on May 11, 1914, with the Interstate Commerce Committee of the United States Senate showed that approximately 66% of the investment in both industries was controlled by holding companies at that time.

Management of Holding Company Systems.—Since holding company systems are composed of large numbers of individual companies tied together by stock control, the problem of securing uniform policies is a real one. In the industrial holding company systems the subsidiaries are frequently dry legal entities with no securities outstanding in the hands of the public. Since nobody can challenge what is done, the holding company treats the subsidiaries as separate divisions of the main company. However, when the subsidiaries are independently financed, as is the usual case with railroads and local public utilities, a different problem arises. Inasmuch as the separate operations of the subsidiaries must be recognized, the

management must be put on a sound legal footing. In the railroad field this end is accomplished by leasing the properties of the subsidiaries to a single company to operate as its own. In the public utility and industrial fields this end is more commonly accomplished by having each subsidiary contract with a central management organization to manage its operations. Each of these methods secures uniformity of policy. Since the public utilities have developed the most noticeable management organizations, it is desirable to examine their organizations in detail.

Public Utility Management.—The management of public utility holding corporation systems may be divided into three classes of activity: (1) operating management, (2) financial management, and (3) construction management.

Operating management deals with those functions which officers of a corporation perform in carrying on the normal day-to-day business activities of the enterprise. These activities would include compilation and analysis of operating statistics, accounting control, determination of operating policies, resolution of legal problems, making financial forecasts, purchasing, advertising, promoting new business, appliance merchandising, rate-building, and report and tax statement making.

Financial management deals with the determination of methods of financing, financial structure, and the disposal of securities to the public.

Construction management deals with the planning and construction of additional plants, extensions, and other facilities.

Management Organization.—The character of the management organization of holding company systems is dictated very largely by considerations of size. Certain types of services can be performed most economically on a large scale; hence, they tend to be conducted for all companies in the system by a central management staff. Other types of service can be conducted most economically by the local operating staffs; hence, they give rise to no intercorporate relationships. From the standpoint of problems presented, operating management, financial management, and construction management differ from each

other. For this reason it is desirable to present the problems and organization of each type of management separately.

Operating Management Organization.—The operating management organizations of holding company systems vary considerably. However, from an analytical standpoint, the organizations managing local properties may be grouped in three classes: (1) a complete operating staff engaged solely by the operating subsidiary, (2) a mere routine operating staff employed by the subsidiary to carry out policies dictated by the management organization connected with the holding company, and (3) a mixture of the two forms mentioned above. In the third type of organization, the staff is complete in certain departments, but relies upon the management organization connected with the holding company for technical direction in other matters. The line of demarcation between the mixed type and the complete subsidiary organization type is not always easily drawn because executives of subsidiaries are brought together through advisory committees even in thoroughly decentralized systems. The advisory committees often conduct cooperative researches of considerable magnitude.

The differences in organization are to be explained chiefly by the size of operating subsidiaries. The large operating property can economically employ, as a part of its own organization, a high class of technical ability. It can do this because it has work enough of a given type to keep specialists fully employed at all times. The smaller companies, having less work of a given type, cannot give full time employment to a specialist in each type of work. Hence, group organizations—affiliated with, or operating as a department of, the holding company—supply operating specialists to the small subsidiaries. The group organization, by serving many small companies, is able to give full-time employment to specialists. The group organization is a more desirable method than that of employing specialists temporarily on a consultation basis because the properties require constant oversight and because the actual costs to the system as a whole are less. As has already been indicated, the group type of organization is sometimes abused.

Excessive fees are charged to subsidiaries for services rendered. Materials and supplies are sold to subsidiaries at unwarranted prices. But waiving occasional abuses, the ability of the group organization to employ its staff permanently and to supervise small properties continuously is a very great source of economy, whether the benefits of the economy be shared with the public or appropriated by the controlling interests. A brief survey of the economies of large scale management and construction will make this fact apparent.

Economies of Large-Scale Management and Construction.—The economies of large-scale management arise principally from three sources: (1) ability to employ a class of managerial talent which is not within the reach of the individual operating companies, (2) ability to employ managerial talent at a better load factor than can individual operating companies, and (3) ability to develop comparative measures of efficiency for a large group of companies, thereby benefiting from the best practice as developed by a large number of companies.

The ability of the group management organization to employ a class of managerial talent that cannot be economically employed by the individual operating companies arises from the fact that the number of employees required to operate a considerable group of companies is sufficiently large to permit specialization in particular services.

Integration of the managerial and construction requirements of many operating companies also permits group management and construction organizations to employ managerial talent at a better load factor than can small operating companies. The diversity of demands of individual operating companies for particular managerial services results in causing the times of small demands by some companies to coincide with the times of large demands by other companies so that a more even flow of work for the managerial staffs follows. This matter of load factor is of special importance to construction organizations, since very large savings are effected by having the same crews employed on job after job, with as much standardization as is possible.

Other economies which arise from group management are those which are obtained through the development of comparative measures of efficiency. Operating a company efficiently is largely a matter of knowing the exact facts concerning it and of knowing in what directions improvements may be made. A management organization having access to all the accounts and records of a large group of operating companies is in an excellent position to derive standards of efficiency. The large management organizations usually install uniform systems of accounting in all affiliated companies. These uniform systems of accounting facilitate comparisons of the operating effectiveness of individual managements and properties. Standards are usually expressed in the form of ratios which come monthly to the attention of special executives assigned to follow the condition of groups of companies. These executives are specially trained to interpret these ratios, and their function is to investigate divergences from the ordinary, and to force remedies of poor conditions, and to bring special sources of economy, developed by particular managements, to the attention of all the companies.

Financial Management Organization.—Practically no operating public utility companies fully manage their own finances in the sense of determining methods of raising capital and of disposing of securities to the public. These activities are practically universally conducted by separate financial service organizations. Explanation of this phenomenon may be found in the fact that a single company or system brings out securities only intermittently; whereas an investment banking organization must have a large continuous flow of security issues in order to be able to retain the technical sales staffs which are necessary for searching out and utilizing the cheapest sources of capital. Hence, separate financial service organizations have developed. The organizations provide an even flow of security issues by acting with other investment banking organizations in the formation of underwriting syndicates. They not only handle public utility securities, but also deal in other classes of securities. These activities make financial service a business by

itself. Hence most financial service organizations are separately incorporated and do not appear as departments of system holding corporations.

Construction Management Organization.—A part of the construction management functions is usually performed by the staffs of operating companies, and a part is ordinarily performed by the group service organization. So far as system planning, as distinguished from construction, is concerned, the considerations are the same as those that determine the nature of the operating management staff: namely, the ability to command first class technicians on a full time basis. However, in respect to actual construction, the very nature of requirements tends to make this mixed type of organization common.

The construction requirements of public utility companies may be divided into two classes: (1) construction of distribution facilities and (2) construction of large central plants and transmission facilities. Distributing and connecting facilities —electric lines, gas mains, telephone lines, etc.—have a comparatively steady, orderly growth which can be economically taken care of by a regular staff of the operating companies. On the other hand, power plants, gas plants, telephone exchanges, high tension transmission lines, etc., have an intermittent growth which can be handled most economically by a construction organization which provides facilities for enough companies to insure a large continuous demand for its services. Further, for best results, designing and construction should be performed by a single organization. The designing of central plant and transmission facilities requires a very high class of technical skill which can be effectively supplied only by large organizations which have a good load factor. Therefore, construction of plant and transmission facilities is usually done by an organization which serves a large group of companies. Further, the group organization frequently betters the load factor on its technicians by undertaking projects for non-related financial interests. When its services are thus raised to the level of an independent business, the organization is usually separately incorporated.

Industrial Management Organizations.—Industrial management organizations have been common for many years but have been less prominent than public utility management organizations. However, in 1938, United States Steel Corporation brought industrial management organizations into the spotlight by setting up a separate management corporation to manage its subsidiary corporations. Chairman of the Board, Myron C. Taylor, summarized the objectives of the change as follows:[4]

> To accomplish a closer operating relationship between the several subsidiary companies it has now been concluded to concentrate the supervision of a considerable number of the existing subsidiaries, excluding public service subsidiaries and railroads, within a management corporation to be known as the United States Steel Corporation of Delaware, the entire capital stock of which is owned by the parent company, the United States Steel Corporation of New Jersey. The companies thus involved contemplate a contractual relationship with the United States Steel Corporation of Delaware, under which they will arrange for its services in a supervisory capacity. . . .
>
> The principal subsidiary companies, the supervision of which is to be concentrated in the new Delaware corporation, are: American Bridge Company, American Steel and Wire Company, Carnegie-Illinois Steel Corporation, Columbia Steel Company, H. C. Frick Coke Company, Michigan Limestone and Chemical Company, National Tube Company, Oil Well Supply Company, Oliver Iron Mining Company, Pittsburgh Limestone Company, Pittsburgh Steamship Company, Scully Steel Products Company, Tennessee Coal, Iron and Railroad Company, United States Steel Products Company, Union Supply Company.

Special Terminology.—Special terms bearing upon holding company structure and operation are very numerous. A classified list of the more important terms would include the following: by asset structure and nature of business—pure, mixed, trading, and non-trading holding companies; by intercorporate structure—primary, top, system, intermediary, intermediate, sub-, subsidiary, and subordinate holding companies; by nature of control exercised—control companies and invest-

[4] *New York Times,* December 9, 1937, p. 39.

ment trusts; by origin of subsidiaries—parent companies and consolidated holding companies; by nature of service functions performed—management, financeering, financing, finance, and investment companies; by industry in which major interest is held—railroad, public utility, industrial, oil, manufacturing, transportation, etc., holding companies.

"Pure holding companies" are those whose only business is that of holding the securities of other corporations. Hence, no operating properties are found among their assets. "Mixed holding corporations"[5] are those which conduct other business as well as that of holding securities. Their assets include both operating properties and securities of other companies. "Non-trading holding companies" and "trading holding companies" are terms used in England to designate "pure" and "mixed" holding companies respectively.

"Primary holding company," "top holding company," and "system holding company" are terms used to designate that holding company which constitutes the single head of a system of subsidiary companies. Sometimes the terms "primary control company," etc., are used in the same significance. "Intermediary holding company," "intermediate holding company," "sub-holding company," "subsidiary holding company," and "subordinate holding company" are terms used to designate those holding companies which are in turn controlled by other holding companies. The terms "intermediary control company," etc., are used in the same significance.

"Control companies" are holding companies which control the policies of other companies through ownership of the voting stocks of the latter. "Investment trust" is a loose expression which is used to designate several types of securities owning organizations. However, the majority of investment trusts are organized as securities holding companies. The

[5] The earliest holding corporations which have come to the attention of the author were mixed holding corporations. Examples are: the Baltimore and Ohio Railroad Co., which was authorized to hold stock of the Washington Branch Road either in 1832 or in 1833; the Pennsylvania Railroad Co., which was authorized to hold the securities of other companies in 1853; the Chicago and Northwestern Railway Co., which became a holding corporation in 1864; and the Western Union Telegraph Co., which was a holding company as early as 1864. (See the article entitled "The Holding Corporation" by M. H. Robinson, in the *Yale Review,* February and May, 1910.)

holding companies which are designated as investment trusts differ from control companies in that they do not seek control of the companies in which they make investments. In theory, such companies diversify the risks of management as well as the risks of changing economic conditions. However, when a single financial interest organizes several investment trusts, it is possible to concentrate financial control under one management even though no single corporation owns such control. In fact, this has been the result in some cases. Under these circumstances the investment trust is a convenient device for befogging the ownership of control.

"Consolidated holding companies" are holding companies which have been formed to unify the control of existing corporations. "Parent companies" are holding corporations which have caused subsidiaries to be organized.

"Management holding companies" actively administer the affairs of their subsidiaries. Administrative supervision is usually made effective by placing holding company officers in key positions in the subsidiary companies. "Finance companies," "financing companies," and "financeering companies" are holding companies engaged primarily in aiding subsidiary companies in financing extensions, acquisitions, etc. "Investment companies" are holding companies which serve primarily as agencies for profitable investment. They usually limit their administrative supervision and financing activities to a much greater extent than do the other types of holding companies. The term "investment company" is also used, particularly in England, to designate those securities holding corporations which are loosely nominated "investment trusts."

A "railroad holding company" is a holding company engaged chiefly in controlling operating railroad companies. Likewise, the terms "public utility holding company," "oil holding company," etc., indicate that the majority of the companies in the system are public utility companies, or oil companies, etc., as the case may be. When holding companies control operating companies in several industries, it is customary to designate them according to the industry from which they receive the major portion of their income. However, this

method is not followed exclusively. Thus Cities Service Company is sometimes designated as an "oil holding company" and sometimes as a "public utility holding company."

There are several terms which designate the underlying companies in holding company systems. The most common of these terms are: controlled company, subsidiary, and proprietary company. Those companies which are controlled by holding companies are known as "controlled companies" or "subsidiaries." In case the holding company owns all of the stock of the controlled company, the subsidiary is known as a "proprietary company."

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CHAPTER 5

STOCK

Nature of Stock.—The stock of a corporation is the aggregate ownership interest in the corporation. This aggregate interest is divided into shares which are owned by shareholders. The shares are evidenced by certificates. Consequently, when people talk loosely about delivering stock and putting stock away, they are really speaking about the certificates that evidence their interest in the corporation. Their shares merely represent a bundle of rights against the corporation. If the corporation were dissolved, each shareholder would receive a part of the assets remaining after creditors were paid. This part would be equal to the fraction that his shares bore to the total number of shares outstanding unless his shares were special shares containing restrictions. In case the business prospered and paid dividends, the shareholder would receive dividends equal to the fraction that his shares bore to the total shares. In other words, all shares of stock stand on an equal footing and share pro rata in any distributions, whatever their nature. However, the stock interest may be divided into two or more parts, and shares in the different parts be sold on different terms. Those shares which still retain the residual position mentioned above are called common shares; those which are given special features are called preferred shares. The aggregate ownership interest represented by the preferred shares is called preferred stock. The aggregate interest behind the common shares is called common stock. The term capital stock is commonly used to designate the stock when it is all of one class, there being no other outstanding.

Statutory Provisions.—Corporation laws specifically cover the power of a corporation to classify its stock. The following excerpt indicates the liberality of the Delaware Law:

SEC. 13. Every corporation shall have power to issue one or more classes of stock or one or more series of stock within any class thereof, any or all of which classes may be of stock with par value or stock without par value, with such voting powers and in such series and with such designations, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, as shall be stated and expressed in the Certificate of Incorporation or of any amendment thereto, or in the resolution or resolutions providing for the issue of such stock and adopted by the Board of Directors pursuant to authority expressly vested in it by the provisions of the Certificate of Incorporation or of any amendment thereto.

Certificate of Stock.—The usual certificate of stock is about eight by eleven inches. At the top, in corners, it gives the number of the certificate and the number of shares. The body of the certificate varies somewhat from company to company, but the general substance is about the same from one certificate to another. The certificate of the Youngstown Sheet and Tube Company may be taken as a sample. This certificate,

This certifies that ________________ is the owner of __________ full-paid and non-assessable common shares, without par value of The Youngstown Sheet and Tube Company transferable on the books of the Corporation in person or by duly authorized attorney upon surrender of this Certificate properly endorsed. A statement of the terms and provisions of each class of shares of the corporation is printed on the back hereof and reference thereto is hereby made. This Certificate and the shares represented hereby are issued and shall be held subject to all of the provisions of the Articles of Incorporation of the Corporation as amended, (filed in the office of the Secretary of State of Ohio), a copy of which is on file with the Transfer Agent. This Certificate is not valid unless countersigned by the Transfer Agent and registered by the Registrar.

Witness the seal of the Corporation and the signatures of its duly authorized officers.

__________ Secretary. Dated __________. __________ Vice President.

Figure 1. Text of Stock Certificate of the Youngstown Sheet and Tube Company

after stating that the company is incorporated under the laws of the State of Ohio, gives the name of the company in large type and states that the certificate is transferable in the City of New York or in Youngstown, Ohio. Then follows the general substance of the certificate, as shown in Figure 1.

At one end of the certificate is: "Registered: The New York Trust Company, Registrar, By ________, Assistant Secretary." At the other end is: "Countersigned: Bankers Trust Company, Transfer Agent, By ________, Assistant Secretary." On the back of the certificate are the excerpts from the articles of incorporation referred to on the face and a blank power of attorney for transferring the shares to another holder.

Stated Value.—Corporation laws require that the capital stock of a corporation be assigned some stated value on the books of the corporation. Thus, the Delaware statute provides:

SEC. 14. As to corporations incorporated on or after April 1, 1929, shares of capital stock without par value, whether common or preferred or special, may be issued by the corporation from time to time by the Board of Directors thereof, unless in the Certificate of Incorporation the power to fix such consideration shall have been reserved to the stockholders. . . .

Any corporation may by resolution of its Board of Directors determine that only a part of the consideration which shall be received by the corporation for any shares of its capital stock which it shall issue from time to time shall be capital. . . .

If the Board of Directors shall not have determined (a) at the time of issue of any shares of the capital stock of the corporation issued for cash or (b) within sixty days after the issue of any shares of the capital stock of the corporation issued for property other than cash what part of the consideration for such shares shall be capital, the capital of the corporation in respect of such shares shall be an amount equal to the aggregate par value of such shares having a par value, plus the amount of the consideration for such shares without par value.

The stated value represents, as is explained later, the fund that the stockholders have committed to the enterprise permanently, the fund that is to absorb losses before creditors suffer, the

benchmark by which the presence or absence of a surplus for dividends is determined. This stated value is subject to adjustment by action of the stockholders, but at any given time it constitutes a number of routine guide posts.

Par Value.—The par value of a share of stock is the amount specified on the face of the certificate. Thus in years gone by, promoters commonly gave shares a par value of $100. In recent years lower par values have been frequent. In addition to par value shares there are many no-par value shares on the market. The par value of a share gives a bench mark against which the payments to the corporation for the share is measured. Under most statutes if shares of stock are sold at less than their par value stockholders can be held liable for the balance in a suit for the benefit of creditors. On the other hand, if no par value is stated, shares can be sold for what they will bring, that is, at different prices at different times, without the stockholders being liable for any additional amount. Historically, the no-par value stock is the oldest, having existed at least since the fifteen hundreds. Par value stock is of comparatively recent origin, having developed during the last one hundred years. Much has been written about the relative merits of par value and no-par value stock. The detailed arguments need not detain us. A good lawyer can do everything with one type that he can do with another. He can possibly do more injury with a no-par value share than with a par value share. This follows because he can have the corporation sell new stock at a price fixed by the directors. This price may be too low and thus dilute the old stockholders' equity in the company by spreading the equity over the larger number of shares when a part of the shares have not been purchased on a comparable basis. It is true that the stockholder can enjoin unfair sales, but this involves legal expense and difficulties of proof which deter effective action. This practice is possible when the stockholder does not have the right to subscribe pro rata for all new shares. However, generally the difference between par value and no-par value stock is negligible. The par value has no significance except for measuring the amount

capitalized. Dividend and liquidation distributions in both cases are paid in proportion to the number of shares. Much has been made of the fact that assets might be put on the books at fictitious amounts in order to equal the par value of the stock issued for them. This is said to make for unreliability in balance sheets. However, most writers overlook the fact that there is just as much incentive to pad the assets so that no par stock will appear to have large asset backing as there is to pad them so that par value stock will appear to have large asset backing. Another argument has been that the purchaser of a share is misled by the par value into thinking that the stock is worth par. The answer is that most purchasers do not see the shares until after purchase, nor are purchasers particularly affected by the differences. If they are so poorly informed that they are misled by the type of thing here discussed, they are too poorly informed to deal in either type of stock and will lose their money anyway. The chief advantages and disadvantages now lie in the taxability of the two types of stock, and these advantages and disadvantages shift with the changing tax laws. For a long time no par shares had the more favorable position; recently par value shares have had the advantage as a whole. However, the advantage depends partly on the par value stated. This may be stated at any figure, since it is of no particular significance except to indicate the amount of stated capital stock. Thus many companies assign a nominal par value of $1 to each share of stock. The stated value of no par shares may likewise be nominal. At least five corporations have been organized in Colorado without any value being assigned to the no-par stock; all the consideration was designated as surplus. At the present writing, Consolidated Steel Corporation, Limited, carries 241,617 shares of no-par stock on its balance sheet at an aggregate value of $1. Enough has been said to show that the par value or stated value of shares of stock is of limited significance to the holder and that the real problem is the number of shares outstanding and the percentage of those shares held by the individual. Little can be gained by pursuing the subject further. The aggregate stated value of stock is, of course, important to creditors.

Liability of Shareholders.—Mention has already been made of the fact that corporation laws generally limit the liability of shareholders. The extent of this limitation requires further discussion. When the stockholder purchases shares of stock in a corporation, he agrees to pay a price for them. If he does not pay the full price agreed upon, the unpaid balance constitutes a debt owed the corporation, which it can collect. It makes no difference whether the shares have a par value or have no par value. If the corporation fails, the receiver or liquidating agent can collect the unpaid balance and apply it to the paying of creditors of the company. In the case of par value stock, statutes usually specify that it cannot be sold at less than par value. If less than the par value is paid in, the corporation has a claim against the stockholder for the balance in spite of any agreements to the contrary. The officers of the corporation cannot set the statute aside. However, if the stock has been marked full-paid and non-assessable and is later transferred to an innocent purchaser without notice, the corporation cannot collect the balance from the innocent purchaser. This liability for the full payment for the stock is known as single liability. In the case of banks, it is not uncommon for the statute to specify that the shareholder shall be liable, in case the bank fails, for an additional amount equivalent to the par values of his shares. This is known as double liability. In Colorado, state bank shareholders are liable for an additional amount equal to twice the par value of their shares. This is triple liability. Prior to 1929, but not now, California made shareholders liable for that portion of the debts of a corporation that their shares bore to the total amount of shares outstanding. In other words the liability was unlimited in total amount, but was limited relatively in that the shareholder could not be held for more than his proportion of the unpaid debts of the corporation. This is proportional liability. In the case of most corporations, liability of shareholders is single. In some states, however, single liability is modified by a provision that the shareholders shall be personally liable for unpaid wages; otherwise the liability is limited to the full payment of the shares.

Payment for Stock.—Stock may be paid for in cash or in property or services. Cash payment is the least subject to manipulation. In case stock is issued in payment for property or services, the question of valuation arises. The directors fix the value of the property. If the property or services are overvalued, the party to whom the shares are issued receives a larger proportionate interest in the company than he should receive, and the interest of the other shareholders is partially transferred to him because all shares stand on the same footing. Since the assets acquired are placed on the books at the value set by the directors, the statement of assets is likewise inflated. When stock is issued in excess of the actual value of the assets, it is said to be watered, that is, issued against water or fictitious values. Watered stock and overcapitalization are not synonymous terms. Watered stock indicates that a *quid pro quo* was not received by the corporation when the stock was issued. Overcapitalization indicates that the corporation is not earning a sufficient amount to make its securities sell at par value. Stock may be watered and yet not result in overcapitalization because the earning power of the corporation causes the shares to sell above par value. On the other hand, the corporation may receive full payment for its shares and yet be overcapitalized because it is unable to develop sufficient earning power to make the shares worth par value.

The shareholder can prevent the issuing of shares against fictitious values of services and property, but to do so he must be able to prove actual abuse. If the difference in values amounts only to an honest difference of opinion, the directors will be upheld. They are entitled to exercise their own judgment. If no par value shares are sold well below prevailing quotations, the shareholder can likewise enjoin the sale. In this case, however, he must show that the price is well below what the price would have fallen to if the same amount of shares had been thrown on the open market. Such proof is very difficult to make because an increase in the floating supply of stock will ordinarily weaken market prices considerably.

Preferred Stock.—Preferred stock is created by dividing the stock of a corporation into classes. Special privileges or

preferences are given to one or more of the classes created. For example, stock may be preferred as to dividends and as to assets. The preferred stock is just a section of the aggregate ownership interest. It receives its preferences by virtue of a special contractual position. As a general proposition, therefore, preferred stock will have all of the characteristics of common stock unless the certificate specifies the contrary. It will vote; it will not be preferred as to assets; and, after common has had a like dividend, it will participate equally with common in further dividends unless the contrary is specified. In a few jurisdictions preferred stock has been held to be cumulative (i.e., deficiencies in dividends at the stipulated rate accumulate and must be paid before the junior shares receive any dividends) when the certificate was silent on this point; in others, non-cumulative (i.e., deficiencies in dividends do not carry over to a succeeding period). The cases holding preferred stock cumulative in absence of stipulation to that effect are now old, and it is doubtful if the question will again arise. Careful lawyers see that the certificate covers all rights of the preferred stockholders in detail; so litigation is not likely to arise on these points. Usually, preferred stock is preferred as to dividends, preferred as to assets, does not vote, does not participate in dividends beyond the stated rate, and, if sold to the public, is cumulative. If issued in reorganizations, it is likely to be non-cumulative. Preferred stock was developed in railroad finance, and in the early years was chiefly a reorganization security. Hence, most of the preferred stock in the railroad industry is non-cumulative.

Preferred as to Dividends.—Preferred as to dividends means that the preferred stock shall receive its entire dividend before the common or junior preferred stock (if there are several layers of preferred stock) shall receive any dividends. This preference is usually coupled with a provision making the dividend cumulative. Cumulative means that if the dividend is not paid in any period, the unpaid amount accumulates from year to year and must be paid in full before any dividend can ever be paid on the junior stock. If the stock is non-cumulative,

the dividend may be passed one year and then never be paid. The next year dividends may be paid on all classes of stock without making good the failure to pay preferred dividends in the prior years. The non-cumulative stock is weak because the management may pass the dividend and build up the equity in the corporation and develop earning power to a point at which dividends can be paid on all classes of stock—this largely at the expense of the non-cumulative preferred stockholder. Only in case the withholding of dividends reaches the level of a fraud can the stockholders get redress. Non-cumulative stock is not ordinarily sold in first instance. It would have little investment appeal. Rather it is forced upon junior creditors or preferred stockholders when a failed company is reorganized. Since the junior creditors are in position to be wiped out, they take the best type of security they can bargain for out of the wreckage. In some cases the dividends are not cumulative but are to be paid if earnings are at a certain level. In such cases it is necessary to specify in the preferred stock contract how the earnings are to be determined because differences in the accounting treatment of expenses may show large earnings or small earnings. Thus properties may be over-maintained, or excessive amounts of depreciation may be charged out as expenses so that no earnings will be shown available for the payment of preferred dividends. In passing, it may be noted that in many cases large accumulations of preferred dividends are not paid; rather the corporation is recapitalized and the preferred stockholders traded out of their old shares (with the accumulations attached to them) into a new security. However, the cumulative feature gives the preferred stockholder a good bargaining weapon during the recapitalization negotiations.

Preferred as to Assets.—Unless the certificate so specifies, preferred stock is not preferred as to assets. Preferred as to assets means that in case of dissolution of the company the shareholder shall receive the amount specified in his shares before the common stockholder receives anything. Usually he is to receive par or stated value if the dissolution is involuntary; a larger amount if it is voluntary. The certificate usually

provides that the preference as to assets shall include unpaid dividends as well as stated liquidation values. However, by a curious line of decisions in the New York courts this preference has been held to include the unpaid dividends only if there is a surplus available for the payment of dividends. Thus if the corporation had run at a loss, the preference would apply to the stated value but would not include unpaid dividends. The Republic Steel Corporation excerpt, set out below, illustrates a common type of provision:

> The amount which the holders of the 6% Cumulative Convertible Prior Preference Stock, Series A, shall be entitled to receive upon any voluntary liquidation, dissolution or winding-up of the Corporation or voluntary sale of all or substantially all of the assets of the Corporation, is hereby stated to be 110% of the par value thereof, plus dividends accrued thereon and/or in arrears, and no more. The amount which the holders of the 6% Cumulative Convertible Prior Preference Stock, Series A, shall be entitled to receive upon any involuntary liquidation, dissolution or winding-up of the Corporation or involuntary sale of all or substantially all of the assets of the Corporation, is hereby stated to be 100% of the par value thereof, plus dividends accrued thereon and/or in arrears, and no more.

This preference is of chief value in the case of voluntary dissolution. If the business fails, it has usually borrowed to such a point that the creditors will exhaust the assets before the preferred stockholders get anything. Much of the value of assets is founded in the going enterprise. If they are liquidated, they bring little. Hence, the preferred stock must usually look to the success of the enterprise for its safety since it is issued in amounts far in excess of liquidation values of the properties of the corporation. However, the fact that the preferred stockholders usually lose in case of failure should not deter the insertion of this preference as to assets. It is always well to have all possible protections in event that they may prove useful in an exceptional case. A protection of great importance in connection with this preference is a clause which restricts the corporation's right to mortgage its properties or borrow in excess of specified amounts except with the approval of the preferred stockholders. Such a restriction on the

creation of debts ahead of the preferred stock is found in many corporations. For example, the Freeport Sulphur Company preferred stock contract provides that:

The affirmative consent (given in writing or at a meeting duly called for that purpose) of the holders of at least three-fourths of the aggregate number of shares of Preferred Stock then outstanding shall be necessary to effect or validate . . . the creation of any mortgage, lien or charge of any kind upon any part of the real or personal property, assets, effects, undertakings or goodwill of the corporation or of any subsidiary; provided, however, that this restriction shall not apply to nor shall it operate to prevent: (1) the giving of purchase money mortgages or other purchase money liens on property which may be hereafter acquired by the corporation or any subsidiary, or the assumption of indebtedness secured by mortgages or other liens then existing on such after-acquired property; or the extension, renewal or refunding of such mortgages; or (2) the pledging by the corporation or by any subsidiary, as security for loans in the regular current conduct of business, and maturing within twelve months, of notes, accounts receivable, merchandise, mined or manufactured products, securities or other liquid assets other than the obligations or shares of stock of subsidiaries.

Participating Features.—Participating preferred stock gives the stock the right to receive dividends along with common stock after common has received an amount equal to that paid on the preferred. Such a provision permits the preferred stockholder to retain his preferred position and still share in the prosperity and growth of the corporation. The participating feature can be drawn in a variety of ways. That stated above is the usual form of participation, the kind the court will find to be meant if the certificate merely states that the stock is participating. However, the certificate could have been drawn so that the preferred would have shared in the ratio of 1% on preferred to 2% on common or in a variety of other ways. The ratio or method of sharing can be anything that human ingenuity can devise. The following sample is instructive:

After class A preferential dividends up to four dollars ($4) per share per annum shall have been paid on the class A stock in any

fiscal year, or declared and set apart for payment in such fiscal year, the holders of the class A stock shall be entitled to participate equally with the holders of the common stock in all further dividends paid in such year (so that each share of class A stock shall receive, in addition to the class A preferential dividend, the same amount as shall be paid in dividends on each share of common stock) until the total dividends paid in any fiscal year on the class A stock, or declared and set apart for payment in such fiscal year, inclusive of the class A preferential dividend, shall equal six dollars ($6) per share, and thereafter such stock shall have no right to participate in any further dividends paid in such year.

Convertible Features.—The preferred may be made convertible into common stock or into another class of preferred stock, or, rarely, into bonds. This means that the stockholder can turn his preferred share over to the company and the company will issue him the securities called for by the certificate. Thus the preferred share may specify that it can be converted into two shares of common stock at any time before January 1, 1970. In this case the individual could present his preferred share to the company and demand two common shares. Of course, the individual would not do so unless the common had become so valuable that two shares of common were worth more than one share of preferred. The Republic Steel Corporation articles may also be used to illustrate this type of provision. These read as set out below:

The 6% Cumulative Convertible Prior Preference Stock, Series A, is convertible at the option of the respective holders thereof at any time, at the office of any Transfer Agent for the 6% Cumulative Convertible Prior Preference Stock, Series A, and at such other places (if any) as the Board of Directors may from time to time determine, into full-paid and non-assessable shares of Common Stock of the Corporation at the rate of two shares of Common Stock for each $100 par value of 6% Cumulative Convertible Prior Preference Stock, Series A, provided that in case of the redemption of any shares of 6% Cumulative Convertible Prior Preference Stock, Series A, such right of conversion shall cease and terminate, as to the shares designated for redemption, unless default shall be made in the payment of the redemption price.

Miscellaneous Provisions of Preferred Stock.—Preferred stock as sold to the public is essentially a borrowing instrument. The corporation, acting in the interests of the common stockholders, raises additional funds. Preferred stock is selected as a borrowing instrument because it is less likely to get the company into trouble during depression periods. Since legally it is an ownership interest, the stock does not mature to embarrass the management with the necessity of paying off a debt. Since the dividends can be passed, the enterprise can curtail payments during periods of poor business. Neither of these things is possible in case bonds are issued. Failure to pay either principal or interest of bonds will plunge the company into receivership or bankruptcy. Since the preferred stock is issued largely as a substitute for bonds, the corporation tends to strip it of as many of the stockholder rights as it can. It may be made callable, that is, the corporation can pay it off according to the terms inserted in the contract whenever the corporation chooses. It may be stripped of its voting privileges or given limited voting power. Limited voting power is frequently given so that preferred stockholders may act if a specified number of dividends remain unpaid or if a mortgage is to be placed on the properties of the company. If the preferred is to be given voting power in case dividends are passed, the provision should be so drawn that it will be effective. Thus a provision giving the right to vote if four successive dividends are passed is defective in that the directors may defeat the voting privilege by paying every fourth dividend or by declaring a small dividend each time. Of doubtful value also is a mere voting right in cases in which the preferred stock votes would constitute only a small minority. For example, the following provision in the Youngstown Sheet and Tube Company preferred stock contract is of little value because the 2,500,000 common shares would still outvote the 150,000 preferred shares.

In event that four consecutive quarterly dividends on preferred shares are in arrears and unpaid at the date of any meeting of shareholders, every holder of record of preferred shares shall be entitled at such meeting to one vote for each share standing in his name on

the books of the corporation at the date fixed for the determination of shareholders entitled to vote at such meeting, or, if no date has been fixed, then at the date of such meeting.

Redeemable Stock.—Redeemable stock is a class of stock that can be paid off at a price specified in the charter and in the certificate of stock. The term *callable* is also applied to stock with this characteristic. Stock is made callable at the option of the corporation so that the corporation can readjust its stock structure as circumstances dictate. Sometimes such readjustment is sought because restrictions in the stock contract hamper the sale of additional amounts of preferred stock. Hence, growth requirements and recapitalizations are interfered with. In other cases readjustment is sought because new issues of preferred stock can be sold on a lower dividend rate basis than that applying to the old issues. In a few cases classes of stock have been called in order to shift voting power from one group to another. However, in the last mentioned cases, the call feature was originally inserted for other reasons.

Call prices are found chiefly in preferred stock issues. Since preferred stock is created in many instances in lieu of bonded debt, the corporation looks at it more in the light of a creditor interest than in that of an ownership interest. Consequently, the corporation frequently inserts in the preferred stock, provisions comparable to those in bonds. As in the case of bonds, preferred stock is usually callable only at a premium which is assumed to compensate the holder for the trouble of reinvesting his funds. As in the case of bonds, advance notice of redemption must usually be given. As is also the case with bonds, a call price will hold the market price of a stock down near the call price if the investment value rises above that point. On the other hand, the stock may sag in value far below the call price if it is of poor grade. The call price of preferred stock is frequently 110 or 120; whereas bond call prices usually range from 100 to 105.

Classified Common Stock.—During the 1920's a considerable amount of so-called classified common stock was issued. The common stock was divided into classes. The chief distinc-

tion between the classes was that one class was deprived of voting rights. Otherwise, there was usually no distinction between the classes. The classes were usually called Class A Common and Class B Common.[1] In some companies the Class A was the voting stock, and in others the Class B voted. This device was resorted to in order to perpetuate a particular group in control. Most of the non-voting common was purchased on a basis of confidence in the management. However, the stock was defective in that the shareholders were powerless to effect a change in management should that confidence later prove misplaced. Usually there was a large number of shares of each class. However, there are cases in which the voting stock represented little equity in the corporation. In Germany the device was carried to its logical conclusion by issuing single shares with rights to a majority of the votes in a corporation. Voting power has also been stripped from common stockholders by the issue of special preferred stocks. Thus at a time when common shares had only one-twentieth of a vote per share, Cities Service Company created a special issue of 1,000,000 shares of one dollar preferred stock carrying one vote per share. This new preferred was sold to H. L. Doherty and Company and gave Mr. H. L. Doherty majority control of a billion dollar organization.

Lack of voting power not only handicaps the shareholder in his ability to oust a poor management, but it may also be disadvantageous in a direct financial way. Thus when Twentieth-Century Fox Film Corporation was formed, much better terms were given to the voting common of Fox Film Corporation than were given to the non-voting common. The differences in allocations of new securities were justified frankly on the grounds that the voting common had control.

Stock and Price Level.—Changing price levels, inflation and deflation, are of very great importance to the security holder. As prices go up, the value of properties owned by the

[1] The student should be careful not to confuse Class A or Class B common shares with preferred shares designated as Class A or Class B stock. For example, the class A shares of Montgomery Ward & Company are $7 cumulative preferred shares; but the Class B shares of The American Tobacco Company are non-voting common shares.

corporation increase. This increase inures to the advantage of the common stockholders because the common stockholders own the residual equity in the business. This is illustrated by the following example:

Price index	100	200
Value of corporation's assets	$10,000,000	$20,000,000
Bonds	4,000,000	4,000,000
Preferred stock	3,000,000	3,000,000
Common stock equity	3,000,000	13,000,000

As the purchasing power of the dollar changes, the corporation's assets rise in value; the debts and preferred stock remain constant because the corporation is obliged to pay only the amount that it has contracted to pay to liquidate these claims. Since the common stockholders own the company, they take the entire enhancement in value. They profit not only by the increase in value of the assets behind their own stock, but also receive the increase in value of the assets contributed by bondholders and preferred stockholders. It is not their concern that the bondholders get dollars which buy only half as much as formerly.

When prices are declining, the reverse situation holds. This may be stated as follows:

Price index	100	50
Value of assets	$10,000,000	$5,000,000
Bonds	4,000,000	4,000,000
Preferred stock	3,000,000	3,000,000
Common stock	3,000,000	3,000,000

Here the assets are insufficient in value to cover the bonds and the stated amount of stock. However, the corporation will not write down the value of the assets on its book, nor normally will it write up the value when the reverse situation is true. But the real values behind its securities will have changed.

What has been said about assets applies equally to earnings. As earnings increase, the corporation pays the amount that it has agreed to pay to bondholders and preferred stockholders; the rest goes to the common stockholders. As earnings fall off, the company must pay its bond interest under penalty of being forced into bankruptcy or receivership. It may, however, pass

the preferred dividends because the payment of dividends is discretionary with the directors. Thus the bondholder always receives his interest if the company can pay it, even though the company is operating at a loss. But the preferred stockholder does not always receive his dividends. He never receives more than the stipulated amount except when accumulated dividends are paid up. In poor years he may receive nothing. The following examples illustrate the situation:

	Normal Year	Boom Year	Poor Year
Net earnings	$10,000,000	$15,000,000	$5,000,000
Interest	4,000,000	4,000,000	4,000,000
Preferred dividends	3,000,000	3,000,000	1,000,000
Available for common stockholders	3,000,000	8,000,000	

The common stockholder takes large returns in the good years and small or no returns in the poor years. But he is not forced into bankruptcy in the poor year if he has financed with preferred stock because the preferred dividend is not a legally enforceable contractual claim unless the directors declare it.

It is because of this claim on residual earnings and residual equities in assets that many persons purchase common stocks as a hedge against inflation. For the same reason common stocks are shunned and bonds preferred during deflation. Participating preferred stock is a hybrid stock that protects in both directions in that, if earnings are good, it shares them along with the common. If earnings are poor, it takes precedence over common to the extent of the stated dividend rate. Convertible preferred stock and convertible bonds also protect against the loss of purchasing power during inflation or rising prices since the holder can convert them into stock after the stock has risen as the result of inflation. Thus, if one share of preferred stock is convertible into two shares of common stock and the common stock rises from $50 to $200 in the market, the preferred stockholder can turn in his share and receive two common shares now worth, in the aggregate, $400. The same thing is true of convertible bonds. However, once the conversion has been made, the holder is at the mercy of the fluctuations of the common stock since he has lost his preferred position and has tied his fortunes forever to the

common. He must now either take the common stock risks or sell out altogether.

Stock Dividends and Split-Ups.—Occasionally directors of the corporation may declare a dividend payable in stock of the corporation. Or the stockholders may vote to call in the old shares and issue two or more shares of new stock for each old one. When dividends are paid in a stock (stock dividends), the shares remain at their old stated or par value and a part of the surplus is transferred from surplus account to capital stock account for purposes of issuing the new shares. However, since the stockholders already owned the entire equity in the business (that is, they owned the values behind both the capital stock and surplus accounts), the aggregate value of the common stock equity in the corporation has not been changed. The stockholder has merely more pieces of paper or a larger number of shares representing his proportionate interest in the corporation. In spite of the fact that the assets of the corporation have not been increased, the shareholder may nevertheless have gained by the stock dividend. If the stock formerly sold at $80 per share and a new share has been given for each old share held, the stock will probably sell for more than $40 per share after the change. More people are in a position to buy the stock now that its price has been lowered. The increased purchases may tighten up the market supply to a point at which prices will rise above the old level. Thus the two new shares, representing the old $80 equity, might well sell at $45 each.

The stock split-up accomplishes the same purpose as the stock dividend: namely, a reduction in the price of the shares. In this case the stated value of the shares is changed. Thus in the above case, the old $100 par value share would be called in and two $50 shares issued in its place. If the old share sold at $80, the new shares might well sell at $45, as in the case of the stock dividend. Either method will produce the same result. However, if there is insufficient surplus to permit the declaring of a stock dividend, the stock split-up must be used. Other angles of this problem will be discussed in connection

with expansion and dividend policies in the chapters on those subjects.

Preemptive Rights.—At common law the shareholder had an enforceable right to subscribe to his pro rata share of any *new* stock issued by the corporation. (The shareholder has no preemptive right to subscribe to any part of the original authorization because it is understood that it is to be distributed generally.) Since he could buy his proportion of the new shares, he could protect himself against a shift in voting control of the corporation and could also protect himself against the dilution of his interest in the surplus and earning power of a corporation which would result if they were spread over a larger number of shares. Much has been made of the voting and surplus angles of the subject of rights, but probably the most significant angle is that of maintaining the stockholder's monopoly of the right to supply new capital. If the company can earn, say twenty per cent on resources used in the business, the right to supply new funds to earn twenty per cent is a valuable privilege, assuming that investments of similar risk could not be found elsewhere to yield so high a return. The stockholder should jealously guard this monopoly. It is sometimes taken away by statute and charter provisions. If the charter provides that the shareholders shall not have the right to subscribe to new shares, then the stockholder contracts away his common law right by becoming a shareholder with that provision in the charter.

Before new stock may be sold to the stockholders, it must be authorized by a special stockholders' meeting. Then the directors fix the price at which it is offered, and offer it in accordance with the needs of the corporation. The new stock need not be offered at book value, that is, at a price which takes account of the surplus as well as the stated value of the stock. However, if the stock has a par value, new shares cannot ordinarily be sold for less than the par value. Aside from the par value limitation, shares may be offered at any price the directors see fit to fix. Thus they can practically force the stockholders to contribute additional capital to the enterprise

by fixing the price of new stock so low that, in order to protect himself against loss, the stockholder must subscribe to the new stock, or sell his rights to those who will.

For example, a corporation with shares selling at $65 a share may offer stockholders the right to subscribe to one new share at $40 for each old share held. Suppose one stockholder in ten refuses to subscribe to his allotment. The result after the other nine had subscribed would be as follows:

10 old shares at $65	$650
9 new shares at $40	360
19 shares now outstanding	$1,010
Value per share outstanding	$53⅛

By refusing to subscribe, the recalcitrant has lost the difference between $65 and $53⅛, or 11⅞ points per share. Obviously he cannot afford to do this. Hence, he will subscribe to the new shares or sell the rights to those who will. In either event the corporation gets the desired funds.

At common law the preferred shareholder had the right to subscribe to new stock as well as the common shareholder. However, consistent with the use of preferred stock as a borrowing device, most preferred stock contracts specifically take away the right to subscribe to new issues. Some of the deeper problems of rights are discussed in the chapter on expansion.

Stock Purchase Warrants.—The stock purchase warrant is an option giving the holder the right to purchase shares of stock at prices specified in the instrument. These warrants are used in a variety of ways. When common stock purchase warrants are attached to bonds, they constitute a hedge against inflation by enabling the holder to take a stock interest. The stock interest will presumably rise in value as the value of property rises. Consequently, the shrinkage of bond purchasing power may be compensated. Common stock purchase warrants attached to preferred shares may serve a like function. If the business is very risky the stock purchase warrant may be used to compensate a creditor for the extra risk taken. If the business succeeds, by exercising the warrants the creditor can share in the prosperity of the concern. A third prominent

use of the stock purchase warrant is that of compensation for promoting interests. Thus the promoter may be given warrants for a portion of his services. If the business is prosperous he can exercise his rights and reap a fortune.

For any of these uses of the warrant to appeal, terms must be satisfactory. The warrant must not expire so soon that it will be worthless; neither can the price be impossible of attainment. Many warrants are made perpetual. In other cases, the duration is limited to a fixed date or to the life of a security to which they are attached. When the warrants are of long duration the corporation frequently sets a series of purchase prices. For example, purchases made up to and including January 1, 1945, may be made at \$40 per share; thereafter until January 1, 1955, at \$50 per share; and thereafter at \$60 per share. In this way the dilution of the common stock equity is mitigated to some extent. To appeal to investment security holders, the option price of the shares must be reasonably close to the existing market values; that is, there must be a possibility that the stock will sell above the option price at some discernible future date. Promoters will probably be in position to fix the price in their warrants at a very favorable level. In all cases, the warrant should provide for adjustment in cases of stock split-ups.

Treasury Stock.—Treasury stock is stock that has been issued and outstanding but has now come back into the possession of the corporation. It is frequently carried among the assets on the balance sheet of the corporation; but it is not an asset. A right that was formerly outstanding against the corporation has merely ceased to be outstanding. Proper accounting should show the stock held in treasury as a deduction from the gross amount of stock outstanding. It is correct, however, to keep the account separate because restrictions which apply to the sale of an original issue of stock do not apply to resales of treasury stock. For example, par value treasury stock that has once been issued as full-paid can be resold at less than par value without involving the purchaser in additional liability.

Treasury stock usually comes into the possession of the

corporation by donation or by purchase. Donations are usually made by large stockholders who are deeply interested in the corporation. However, in cases of financial difficulty all stockholders in a corporation may contribute a proportion of their shares to the treasury for resale. In this way new funds may be obtained for the business. In earlier times it was rather common for a corporation to issue an excessive amount of stock for property; then the seller would donate a part of the stock to the company. By this device the corporation made the stock full-paid so it could be resold at any price obtainable without making the stockholder liable for the discount.

Purchased stock constitutes the bulk of treasury stock in present times. In a majority of the states, corporations are permitted to purchase their own shares so long as they do not impair their capital or injure creditors by the practice. In many states, the statutes specifically confer on corporations the right to purchase their own shares. In many other states the courts have held that such power existed in the absence of an express prohibition. Under these permissions many corporations have stabilized the market prices of their shares by purchases during reactions and sales during rises. However, since enactment of the Securities Exchange Act, corporations have engaged less in the purchase of their own shares.

Transfer of Title to Stock.—A share of stock can be transferred by merely endorsing the certificate and delivering it to the vendee or donnee. Most certificates of stock contain a blank form of assignment on their backs. The holder may sign this, or he may both sign it and fill in the name of the transferee. Delivery then completes the transaction. The transferee next presents the certificate to the transfer agent of the corporation, or more probably has his broker do so, and has a new certificate issued to him. The transfer agent will take up the old certificate. Stock is one of the easiest types of property to transfer. The chief problems arise where certificates have been lost, stolen, or fraudulently transferred. At common law the stock certificate was not negotiable: that is, an innocent purchaser of a lost or stolen certificate got no

better rights than those of the person who sold it to him. This possibility that the certificate might not give good title to the stock deterred stock transactions to an appreciable extent. The commercial community, in search of greater security in transactions, agitated for legislation making stock certificates negotiable: that is, legislation making the certificate, in proper form and sold to an innocent purchaser without notice of a defect of title, carry title to the shares even though it had been lost or stolen. This agitation finally culminated in passage of the Uniform Stock Transfer Act in half of the states in the union. This act makes stock certificates negotiable if two conditions are fulfilled: (1) the corporation is organized in a state having the act, and (2) the transfer takes place in a state having the act. A forged signature does not protect the innocent purchaser under this act any more than a forged signature on a note gives the purchaser a claim against the party whose name has been forged. But the act does protect the purchaser of shares which are in proper form. It throws the loss upon the

For value received ______________ hereby sell, assign and transfer unto

____

____

____ Shares

of the Capital Stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

____ Attorney,

to transfer the said stock on the books of the within-named Company with full power of substitution in the premises.

Dated ______________________

In Presence of: ______________________

____

Figure 2. Form of Power of Attorney Used by the Youngstown Sheet and Tube Company

person who has carelessly endorsed certificates and then permitted them to get into other hands. The chief weakness in the act, aside from technical defects, is that all states have not ratified it. Consequently, the corporation may be organized or the transaction take place in a state not having the act. In that case, the innocent purchaser is not protected.

Power of Attorney.—The forms of the power of attorney on the back of stock certificates vary somewhat. However, the form on page 89, used by the Youngstown Sheet and Tube Company, indicates its essential character. This form is generally used.

Transfer Agents and Registrars.—In the early days of corporate development the corporation officers issued the certificates and recorded them in the books. This arrangement led to abuses. Officers might issue more certificates than were authorized. Thus, it is recorded that in the early days of railroad finance one of the leading railroad financiers frequently sold the stock of his road short. If the market then went up, he issued more shares and delivered them to cover his short commitment. Abuses of this type led to having a separate trust company register the shares of stock, commercial paper, and bonds of corporations so that there would be no overissue. The business of transferring shares on the books from one holder to another has also become a specialized business conducted by trust companies. These trust companies are made agents of the corporation to take up old shares and issue new ones in their stead when transfers of ownership have taken place. For the convenience of its shareholders a corporation frequently designates several transfer agents. Thus it will, and by exchange regulations must, have a transfer agent on the island of Manhattan if its shares are listed on the New York Stock Exchange. This arrangement makes it easy for brokers to transfer stock into their customers' names. It is customary for the transfer agent to present to the registrar each morning the canceled old certificates and the new certificates to be issued in their stead. The registrar then registers the new certificates, cancels its own signature on the canceled certificates, and re-

turns both to the transfer agent. The transfer agent then delivers the new certificates and ordinarily reattaches the canceled certificates to the stubs from which they were originally taken. Thus both a past and a present record are afforded.

Stock Terms.—Authorized stock is stock that the shareholders have voted the authority to issue.

Debenture stock is a term used in England to designate debenture bonds and used in this country to designate a preferred stock. Since the terms of the stock can be arranged to cover any provisions that the corporations deem desirable, the purchaser must read the individual certificate to determine its nature.

Deferred stock is a class of stock which does not receive dividends until some condition is fulfilled. Here again the individual certificate is the only guide to the nature of the share.

Forfeited stock is stock that has been subscribed and partially paid for and then forfeited to the corporation for non-payment of a remaining installment of the purchase price.

Guaranteed stock is stock the dividends on which are guaranteed by another corporation. This type ordinarily arises in connection with the leasing of one corporation's properties to another corporation. Instead of paying a lump sum rental, the leasing corporation agrees to pay a fixed rate of dividends on the lessor company's stock.

Manager's shares are a special class of stock issued to the officers of a corporation in order to permit them to share in the profits that they create. The individual issues must be studied in order to determine the exact rights of the holder.

Outstanding stock is stock that has been issued and is now held by the public.

Part-paid stock is stock that has been subscribed, but which has been only partly paid for.

Prior lien stock is ordinarily a preferred stock that stands ahead of some other class of preferred stock. It is just a name. The purchaser must read the terms of the contract and examine the structure of the corporation to see what securities

have prior claims before he can tell exactly what his rights are. The prior lien stock may have been set ahead of another issue when brought out, but the other issue may have disappeared. The issue may be an ordinary preferred stock dressed up in a new name to attract purchasers.

Prior preferred stock can be described in the same way that prior lien stock was described.

Unissued stock is authorized stock that the directors have not yet voted to issue.

Vetoing stock is stock that has a limited voting power on specified questions. Exercise of the vote gives the stock power to prevent the corporation from embarking on a particular course of action. For example, a preferred stock may provide that no mortgage shall be placed on the corporation's property without the affirmative vote of two-thirds of the preferred stock. A negative vote of more than one-third or a failure to vote by more than one-third would defeat or veto the proposal.

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CHAPTER 6

BONDS

Borrowed Funds.—The corporation may obtain a part of its resources by borrowing. Borrowing contracts may be long term or short term, secured or unsecured, formal or informal. The formal certificates of indebtedness are called bonds; the less formal ones are called notes or bills, depending upon their tenor. The corporation borrows money usually because it can use the borrowed funds to earn more than the rate of interest paid for the use of the funds. This practice is known as trading on the equity. As noted in the preceding chapter, the common stockholder owns the residual equity in the corporation. This equity is put up as protection to the creditor, since the creditor must be paid in full before anything is allowed to the stockholder. Because of the greater safety of his position, the creditor is willing to take a lower rate of interest than the rate at which the corporation can employ the funds. Further, because of his monopoly of the right to put new funds into a prosperous business, the stockholder can refuse the creditor the right to supply funds to the business on terms which are more favorable than the prevailing rate of interest.

The effects on the common stock have been partially illustrated in the chapter on stock. However, the effects of borrowing can be illustrated as follows:

	Average Year	Boom Year	Poor Year
Value of assets	$10,000,000	$10,000,000	$10,000,000
Bonds 5's	4,000,000	4,000,000	4,000,000
Common stock equity	6,000,000	6,000,000	6,000,000
Net earnings	1,500,000	2,500,000	300,000
Interest	200,000	200,000	200,000
Net income	1,300,000	2,300,000	100,000
Rate earned on assets	15.0%	25.0%	3.0%
Rate of interest on bonds	5.0%	5.0%	5.0%
Rate earned on common stock equity	21.7%	38.3%	1.7%

In this illustration, the company borrows new funds at one-third as high a rate as the business earns on the average of funds invested in it. The effect of the constant interest charge is to magnify both the increases and the decreases in earnings on common stock equity.

Sometimes businesses borrow because that is the only way the necessary funds can be assembled. The stockholders are unwilling to put up more money; yet the business must have more funds. Borrowing is the only way out. This has been particularly true in the cases of some railroads. For the most part, however, business hopes to earn a return in excess of the interest paid. It is for this reason that corporation debts tend to become permanent. If there was an advantage in borrowing in the first instance, there is usually an advantage in continuing to borrow. Debts tend to become perpetual even though the bond contract is limited in duration. Although there are some perpetual bonds outstanding, e.g., the Public Service Corporation of New Jersey 6's, most bonds have a fixed maturity dependent roughly on the visibility in the particular line of business. Corporations whose business appears to be of permanent importance can put out issues for 50 or 100 years. Those which are very risky may have to sell 5- or 10-year bonds. The short maturity gives the bondholder a chance to reappraise the risk at short intervals. Then, if things are going well, the corporation can readily sell a refunding issue. If things are not going well, the corporation will have to make the refunding issue more attractive than the old issue was. If the company is unable to sell a refunding issue at all, then the company will be forced into a reorganization in which the bondholders will be in a position to appropriate the stockholder's equity to the extent necessary to better their position. Under these circumstances, the resources obtained by borrowing tend to become a permanent contribution to the business, and the debt tends to be a permanent part of the capitalization.

Except in the case of timber, mineral resources, railroad equipment, steamship, and similar types of bonds issued against resources which will be exhausted and never replaced, bonded debt, while secured by particular assets, is not closely

related to the life of the particular assets securing it. Rather, the bondholder relies on the fact that as one piece of property wears out, other pieces will be substituted for it in the company's facilities. Further, the bond covenants will ordinarily be so drawn that such substitution will be required. Nevertheless, as will be pointed out in a later chapter, the main protection of the bondholder is the earning power of the concern. Without earning power, the assets have no value. But since earnings are the product of management working with assets, it is well for the bondholder to have a lien on this essential component of earning power.

Issuing Bonds.—As was pointed out in the chapter on management, the directors of the corporation have the power to borrow money for corporate purposes. At common law they could also mortgage the premises. However, in a number of states, statutes now restrict the power of the board to issue bonds and to create mortgages. For example, the New York Stock Corporation Law provides:

> Every stock corporation other than a moneyed corporation shall have the power to borrow money and contract debts, when necessary for the transaction of its business, or for the exercise of its corporate rights, privileges or franchises, or for any other lawful purpose of its incorporation; and it may issue and dispose of its obligations for any amount so borrowed, and may mortgage its property and franchises to secure the payment of such obligations, or of any debt contracted for such purposes. The consent to the execution of such mortgage, except a purchase-money mortgage, by the holders of not less than two-thirds of the total number of shares outstanding entitled to vote thereon, given either in writing, or by vote at a meeting of the stockholders called for that purpose in the manner prescribed by section forty-five, shall be required.

When such statutory restrictions do not exist, it is common to restrict the power of the board in this respect by inserting in the charter a provision requiring that the stockholders authorize bond issues and mortgages. If this policy is followed, the board will probably negotiate with bankers concerning the terms on which an issue can be sold. It will then

submit the proposal of a bond issue to the stockholders at a special meeting. The stockholders will approve the issue in general terms, leaving the directors leeway to fix interest rates and provisions in accordance with changing market conditions. The final details will then be arranged between the corporation and the bankers.

The bankers will control to a very large extent the terms of the issue. The banker is primarily a merchandiser of securities. He must fit the issue to the tastes of the market at the time. Not only must he do this; but, like the grocer, he must sell a product that will cause his customers to return and make additional purchases later. The terms, then, will be largely the prevailing terms at the time. The banker will look to the resale possibilities; the corporation will try to get terms as little restrictive and as little costly as possible. When these are agreed upon, the parties enter into a contract. The bonds are engraved according to standards set by the banker; signed by the designated officers of the corporation, usually president and secretary; and delivered to the bankers. It is customary in this country for bankers to pay cash for the issue when purchased and then to reimburse themselves by resale. During the resale period, they pledge the bonds with commercial banks to get the funds to pay the corporation. Since salesmen start selling the bonds as soon as the house knows it is to receive the issue, most of the bonds are usually sold before the certificates are available.

Details of the Bond Contract.—The contract will contain a definite promise to pay a stated sum of money. Most bonds are of $1,000 denomination, but in recent years, bonds of $50 and up have become common. Formerly, bonds contained clauses requiring payment in gold of present weight and fineness, but this type of protection against the changing purchasing power of the dollar has been nullified by congressional act. It is not uncommon, however, to make bonds payable in foreign currencies. This is suitable protection against changing money standards, provided the foreign currency is not devalued.

The bond also specifies the time of payment. It contains an absolute final maturity date; but it usually also contains a provision that the company can pay it off prior to maturity by paying a premium, of; say 2%, to cover the inconvenience of the lender. This right to call in the bond in advance of maturity causes the bond to be known as a callable bond. If the bond can be paid at par at the end of, say 30 years but must be paid at the end of, say 32 years, the bond is known as a spread maturity bond. This type of provision is inserted in the bond to permit the company leeway in meeting debts during business cycle changes. Bonds are made callable so that the company will not be prejudiced in its financial structure. It cannot always foresee its position years from the date of financing. It may enter into restrictions which hamper future growth or adaptation of the corporation. If the bonds are callable, the company can get rid of these restrictions by calling the old bonds and selling a new issue without the undesirable features. A further advantage of the callable feature, and one much more important to the general run of corporations, is that it permits the corporation to replace high interest rate bonds with low interest rate bonds when conditions are favorable. The corporation sells a long-term bond so that it will not be embarrassed by near-term maturity but leaves the way clear to reduce its interest burden if interest rates fall. The length of the contract, of course, protects the corporation against a rise in interest rates.

The rate of interest and the times and places where it is payable are also specified in the bond. The rate of interest is usually a fixed amount which must be paid without option on the part of the corporation. However, it is customary to give a period of grace of from 30 to 90 days before the issue can be declared in default. A default is serious because most corporation bonds provide that if the bond is in default, the entire principal becomes immediately due and payable. This type of a provision is known as an acceleration clause. It serves to bring pressure on the company not to permit a default because of the serious consequences a default would entail, and also to give the bondholders an opportunity to clean up a bad

financial situation all at once, instead of waiting to sue on each coupon as it comes due. In this respect, private corporation bonds differ from government bonds. Government bonds do not usually contain an acceleration clause.

Income bonds and adjustment bonds contain provisions stating that the interest is payable only under certain prescribed conditions—usually, only if earned. These bonds are usually put out in the course of a reorganization to replace fixed income bonds, the charges of which the company was not able to meet because of irregular earnings. However, some issues are sold to the investing public for cash; but these are of limited amount. The interest on income bonds is usually made payable by action of the board of directors, much as preferred dividends are paid. The interest may be made cumulative like preferred dividends. The chief distinction between income bonds and preferred stock is that the bond comes due and payment can be forced in court; that is, the holder has a creditor status. Further, the interest payment on income bonds is a deductible item in computing the taxable net income of the corporation. This factor tends to reduce corporation income taxes. Otherwise, the securities are much alike. As in the case of preferred stock, the income bond contract should make careful provision for the computation of earnings and the procedure for determining when interest must be paid.

Most bonds contain provisions for the redemption of a portion of the issue before maturity of the entire issue. In some cases, the bonds become due in series; in other cases, a sinking fund is set up, and the bonds are purchased in the open market or drawn by lot and called for the sinking fund. In still other cases the bonds are made convertible into stock. As the methods of redeeming bonds have many important financial angles, a separate chapter is reserved for discussion of the subject in detail. Bonds are usually made payable at some specified bank or banks. In large numbers of instances, they are secured by mortgage or by the pledge of specific property. The matter of security is discussed in the next chapter.

Bond Covenants.—Even in the case of debenture (unsecured) bonds, it is necessary to insert in the agreement a great

variety of provisions for the protection of the bondholders. These provisions relate to the payment of dividends which might impair the strength of the corporation, to the maintenance of adequate amounts of working capital with reference to fixed assets, to the creation of other debts, or to a variety of other subjects. In bulk, however, the details will be too large to include in the individual bond certificates. Hence, a very detailed blanket agreement is prepared covering the rights of all bondholders, and this agreement is entered into by the corporation and a trustee who is to represent the interests of all bondholders. The trustee, usually a trust company, holds this agreement and acts to compel compliance with the agreement if a stated percentage of the bondholders give it written notice to act and indemnify it for its legal costs. Usually, the covenant also contains a restriction on the right of the individual bondholder to sue the company separately. This restriction is for the protection of the bondholders as much as it is for the protection of the company from harassment. A suit on a bond will ordinarily cause a slump in the market price of bonds of that issue; consequently, the other bondholders have an interest in preventing individual actions. Frequently, more is to be gained by keeping a breach of covenant quiet than by exposing it. The company may repair the breach; consequently, no damage would be done to market prices.

The trustee is ordinarily required to authenticate bonds as of the issue for which it is trustee. This will prevent overissue as was discussed in connection with the registration of shares of stock.

Debenture Covenants.—Although debentures are not secured by mortgage or pledge of specific assets, they are frequently protected by restrictions placed on the issuing corporation. These restrictions are designed to keep the corporation in a comfortable cash position and to prevent the incurrence of an excessive amount of debt. For example, Realty Associates Securities Corporation covenanted to maintain, "while any of these bonds are outstanding, cash and securities, all maturing prior to 1937 . . . aggregating in value at least $1,000,000 in excess of the amount of these bonds

from time to time outstanding and of any other indebtedness." National Food Products Corporation covenanted that "insurance aggregating $850,000 on lives of certain executives of the corporation and its subsidiaries will be deposited with the Trustee for the benefit of bondholders." American I. G. Chemical Corporation covenanted "not to pledge any of its assets, except for short-term debts in the ordinary course of business, without granting ratable security to these debentures." American Brake Shoe and Foundry Company covenanted that: "(1) while these Notes are outstanding, no mortgage, pledge or other lien may be created, other than the pledge of current assets to secure current bank loans having less than one year to run, unless the Company shall first execute a closed mortgage securing these Notes (but no other indebtedness), covering all of its then fixed assets; (2) the Company will not enter into any merger or consolidation or convey all, or substantially all, of its property and assets to another Corporation unless said mortgage has first been executed, and the successor Corporation shall assume the payment of principal and interest on these Notes and the covenants and provisions contained in the Indenture and in said mortgage." Philadelphia & Reading Coal and Iron Company covenanted that "Company will not, through payments of dividends on its capital stock of any class, or other distributions to its stockholders, voluntarily reduce its current assets below twice then existing current liabilities and/or net current assets below $7,500,000."

These are but samples taken from a large range of restrictive provisions. If enforced, these limitations give the debenture a position of security much more substantial than that of a mere promise to pay the debt.

Definitions.—Bonds are classified in several ways. Classifications by type of corporation issuing them (railroad bonds), by purpose (refunding bonds), by nature of security (first mortgage bonds), and by conditions of payment (callable bonds) are common. Classifications are merely pigeonholes where the mind can store similar types of instruments.

The student is not to take them too seriously. Bonds are not issued to fit classifications, but to raise money for corporations. Consequently, they contain provisions which cross many classifications and frequently meet none fully. The student should appreciate that the essential thing is to read the provisions of the bonds. These will give specific information on the subject matter covered, and no amount of misleading captions will affect the rights therein stated.

Most bond terms are self-explanatory. However, a few are confusing to the beginning student. The following list will perhaps clarify matters.

Assumed bonds are bonds of a company which has been sold to, merged, or amalgamated into another corporation. In the process of consolidating the enterprises, the new corporation promises to fulfill the bond obligations of the old company. It "assumes" the bonds.

Blanket mortgage bonds are bonds secured by a mortgage which covers all the properties of the corporation.

Consolidated and refunding bonds are bonds which have been issued by a corporation which was formed by consolidating two or more smaller companies. Such a corporation usually creates a mortgage covering the combined properties and containing provisions for the refunding of underlying bonds issued by the old companies. The bonds secured by this mortgage are known as consolidated and refunding bonds.

Convertible bonds are bonds that may be exchanged for stock in the corporation.

Coupon bonds are bonds with coupons for each interest payment attached to them. The holder cuts off the specified coupon at each interest date and deposits it at his bank for collection. The bank sends it to the corporation's bank for collection and credits the proceeds to the customer's account.

Cumulative income bonds are bonds whose interest need not be paid unless earned. But if the interest is not all paid at each interest date, the unpaid balance accumulates and must be paid before any dividends can be paid on stock. In some cases, it must be paid if there are sufficient earnings in later years, regardless of dividend payments to stockholders.

Debenture bonds are bonds which are not secured by mortgage or pledge of property. They are the mere promise of the company to pay.

First lien bonds are bonds having a first mortgage on the company's property.

Floating debt is short-term debt which has not been funded into bonds.

Funded debt is debt that is evidenced by bonds.

General mortgage bonds are bonds secured by a mortgage covering the whole properties of the corporation. This phrase usually implies that the corporation has underlying bonds on separate sections of the company's properties, but need not necessarily do so. Only a reading of the provisions of the issue will tell exactly what the situation is. Blanket mortgage is synonymous.

Guaranteed bonds are bonds the payment of which is guaranteed by some corporation other than the issuer. For example, industrial corporations frequently guarantee the bonds of their small subsidiaries. This makes it possible for the subsidiaries to borrow at a lower interest rate, because the borrower is protected by the credit of the parent company.

Interim certificates are instruments which are delivered to purchasers of bonds pending the final engraving and delivery of an issue. It takes about six months to engrave an issue of bonds. Because of changes in the securities markets, the investment banker must sell the issue immediately. Consequently, he sells the bonds and gives the purchaser temporary certificates to hold until the final certificates are ready for distribution.

Joint bonds are bonds that have been issued by two or more corporations jointly. The corporations jointly promise to pay the debt. These bonds arise frequently in connection with the building of union railroad terminals. Each road that uses the terminal lends its credit to the combined enterprise.

Perpetual bonds are bonds that never come due. A few corporations have them in this country, but they are most common among European government obligations.

Prior lien bonds are bonds which are secured by a mortgage

which ranks ahead of some other mortgage. Prior lien bonds are not necessarily first lien bonds. They might be fourth mortgage bonds ranking ahead of fifth mortgage bonds.

Purchase money mortgage bonds are bonds secured by a mortgage which was given as a part of the consideration for property when it was purchased.

Refunding bonds are bonds which were sold to provide funds with which to pay another issue of bonds.

Registered bonds are bonds which are registered by the company as belonging to a particular person. They are transferred by endorsement, but the company takes no note of the transfer, until the bond is sent in for reregistration on the company's books. Interest payments are made by check to the registered holder of the bonds. In some cases, the bond is registered as to principal, but not as to interest. In this case, the principal is payable to the registered holder, but the interest is payable to the bearer of the coupons.

Stamped bonds are bonds which have been modified in some way after they were issued. The face is stamped, "Subject to the provisions set forth on the back hereof." On the back will be stamped the changes in the mortgage, sinking fund, or other terms that have been modified by consent of the bondholders.

Underlying bonds are bonds which have a prior or superior lien to that of some other issue. With respect to the other issue, they are said to be underlying.

Unfunded debt is debt that is evidenced by short-term instruments. It is floating debt.

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CHAPTER 7

MORTGAGES

Relation of Security to Debt.—If no restrictions were placed upon the ability of the corporation to borrow, it might borrow money in large sums and dissipate the proceeds to a point at which the assets would be far too insufficient to meet the claims of creditors. Consequently, creditors seek to protect themselves against this possibility either by limiting the amount of debt that a corporation can incur, or by obtaining a preferred position over other creditors. There are several methods of obtaining a preference over other creditors, but the most important of these is by taking a mortgage on the property of the corporation. The mortgage is in form a deed to the property with a clause in it stating that the deed will be void if the money is repaid in accordance with the provisions therein stated. Having deeded the property to one group of creditors, the corporation is not in position to deed it to another group. A second mortgage would give the later creditors only the right to pay off the first mortgage creditors and thereby realize whatever value the property had in excess of the first mortgage debt. Even with the mortgage, the bond is the principal undertaking. The mortgage is merely a collateral undertaking to secure better the repayment of the loan. Hence, if through careless draftsmanship the provisions in the bond disagree with the provisions in the mortgage, the bond will prevail because it is the principal undertaking.

Form of the Mortgage.—The corporate mortgage was an adaptation of the real estate mortgage used in connection with the financing of farms, commercial buildings, and homes. The real estate mortgage, in turn, was an adaptation of the deed by which property was conveyed. As has been indicated, the only difference in form between the early mortgage and the

deed was the inclusion in the mortgage of a clause to the effect that if the debt was repaid, the deed would be void. In early times, this arrangement was literally enforced. If the money was not repaid, the title to the property vested absolutely in the mortgagee (the party who lent the money). This result held even though the amount of the loan was but a small fraction of the value of the property. First, the courts began relieving against forfeitures by permitting delayed payments. Later, the legal status of the mortgage was changed by statute and court decision to a point where today the mortgagee has merely the right to bring a judicial proceeding to foreclose his mortgage. On foreclosure, the property is sold at public sale and the proceeds applied to the payment of the debt and the balance delivered to the debtor. If there is no balance but rather a deficiency so that the debt is not entirely paid, the court will render a decree for the difference against the debtor. The creditor can then have the sheriff seize any other property of the debtor and sell it to satisfy the decree or judgment. The mortgage, being a defeasible deed to certain property, does not, of course, affect any property other than that specifically described in the mortgage. Consequently, the debtor can give as many separate first mortgages as it has separate pieces of property not covered by other mortgages. Further, the debtor may mortgage some of its properties and leave others free from mortgages. The descriptions in the mortgage will be the same technical descriptions that would be found in a deed. The major differences today are that the mortgage now contains a great variety of special clauses dealing with the management of the property during the life of the mortgage. These clauses are discussed in the next section.

Specific Covenants in the Mortgage.—Among the more prominent clauses inserted in corporate mortgages are: (1) *A covenant to pay the debt.* This covenant usually provides that both principal and interest will be paid without deduction of taxes. The promise to pay without deductions safeguards the negotiability of the bond. (2) *A covenant not to extend the time of payment.* This protects the non-assenting bondholders

by giving them a right to foreclose unaffected by negotiations with others to extend the time of payment. This clause is especially important in cases involving wasting assets. (3) *A covenant to discharge taxes.* Since taxes become a prior lien on property, it is essential for the protection of the bondholder that taxes not be permitted to pile up against the property. In connection with this clause, it is customary to provide that in case the corporation fails to pay taxes, the trustee under the mortgage may pay them and add the amount to the principal of the debt. This procedure at least prevents penalties from accumulating. (4) *A covenant to insure against losses* to the extent that similar businesses insure against them. Under the older practice, and still in the case of residential property, the policy was held by the trustee. The present tendency is for the corporation to hold the policies and report to the trustee. However, the policies are usually payable to the trustee. Insurance protects the bondholder against destruction of the values behind his loan. (5) *A covenant to keep the property in repair and prevent waste.* This clause usually sets up definite standards covering the replacement of property and repairs thereon. It may require that engineers certify to the trustee the condition of the property. It may also provide that the company deposit with the trustee a sum equal to any deficiency in the properties. In other cases, it may require an independent engineering report, at the expense of the company, on petition of a given percentage of the bondholders. (6) If leases are involved, *a covenant to perform lease covenants* and thereby prevent default under the leases. (7) *A covenant that the corporation has good title* to the premises mortgaged. (8) *A covenant to give further assurances.* This provision is especially important in connection with after-acquired property clauses. The corporation may be required to execute supplemental indentures for the further protection of the bondholders. (9) *A covenant to record the mortgage* and pay all taxes and fees incidental to the recording. This clause shifts responsibility for the recording from the trustee to the corporation. (10) *A covenant to maintain the corporate existence.* In this case, the mortgage may provide that the

corporation cannot merge or amalgamate with another corporation without the consent of the bondholders. (11) *A covenant to maintain an office* (usually at the trust company which is trustee under the mortgage) where coupons may be presented and notices served on the corporation. (12) *A covenant to comply with laws.* (13) *A covenant waiving stay and redemption laws.* But the corporation cannot waive a statutory right of redemption. However, the statutory right may not extend to corporations, though it does to individuals. (14) *A covenant not to issue bonds except in accordance with the mortgage* and to apply proceeds as required under the mortgage. (15) A covenant providing that certain failures of the corporation to live up to the terms of the mortgage shall constitute *defaults,* mature the principal, and permit foreclosure. (16) In addition to these covenants, there are a host of others which vary with the circumstances of the situation. Thus, if there are underlying bonds also secured by mortgage, covenants may provide that no more bonds shall be issued under the terms of the underlying mortgage. This is known as closing the underlying mortgage. Provision will also be made to prevent extension of the underlying bonds and the payment of interest on them. These provisions will make the overlying mortgage ultimately become a first mortgage and prevent jeopardizing that mortgage by defaulting on interest payments on the underlying bonds. Other covenants will cover other special situations in like fashion.

The following excerpts from the Jones and Laughlin Steel Company mortgage will illustrate the general tenor of corporate mortgages. This mortgage covers about 65 printed pages. Consequently, it is impossible to set forth more than fragments of it in this chapter.

(Excerpts from Jones and Laughlin Steel Co. Mortgage)

THIS INDENTURE, dated the first day of May, one thousand nine hundred and nine, between the Jones & Laughlin Steel Company, a corporation organized and existing under the laws of the State of Pennsylvania (hereafter called the "Company"), party of the first part, First Trust and Savings Bank, a corporation organized and existing under the laws of the State of Illinois, herein called the

"Corporate Trustee," and Emile K. Boisot, herein called the "Individual Trustee," parties of the second part, *Witnesseth:* . . .

[*Here follow various recitals, the form of the bond, and the form of the coupon.*]

Now, Therefore, This Indenture Witnesseth:

That in order to secure the payment of the principal and interest of said bonds . . . the Company . . . has bargained, granted, sold, . . . unto the Trustees, . . . the following described property, which is hereinafter referred to as the trust estate, viz.:

I.—All the following described real estate owned by the Company in the County of Allegheny, State of Pennsylvania, to wit: . . .

[*Here follows a detailed technical description of the property.*]

All the real estate owned by the Company in the City of Chicago, County of Cook, State of Illinois, including the following more particularly described property, to wit: . . .

[*Here follows a technical description.*]

All the interest of the Company in all property which may in any manner be hereafter acquired, either as additions or improvements—and all property that shall be acquired—with the bonds or their proceeds.

Together with all and singular the buildings, improvements, railroads, rolling stock. . . .

The following shares of fully paid and non-assessable stock, which are hereby pledged with and delivered to the Trustee: . . .

[*Here follows an itemized list of stocks of subsidiary companies.*]

To Have and to Hold all and every the said premises, stock, rights, franchises and other property, real, personal or mixed, unto the Trustees and their successor or successors in the trust, forever.

But in Trust, Nevertheless, for the common and equal use, benefit and security of all and singular the person or persons, firm or firms, bodies politic or corporate, that shall from time to time be holders of any of the bonds or coupons, and without preference of any of the bonds over any of the others by reason of priority in the time of issue or negotiation thereof, or otherwise howsoever; subject to the terms, provisions and stipulations in the bonds and coupons contained, and for the uses and purposes, and upon and subject to the terms, conditions, provisions, and agreements, in this indenture expressed and declared; and it is hereby covenanted that all such

bonds, with the coupons for interest thereon, shall and will be issued, authenticated and delivered, and that the trust estate is to be held by the Trustees, subject to the further covenants, conditions, uses and trust hereinafter set forth; and it is hereby covenanted and agreed between the parties hereto as follows, to wit:

Article One

Execution, Authentication, Issue and Registration of Bonds

Section 1.—The bonds to be issued under and secured by this indenture, together with the interest coupons appertaining thereto, shall be substantially of the tenor and purport above recited. . . .

Section 2.—$2,069,000 face amount of bonds, being bonds numbered consecutively from 1 to 2,069, inclusive, shall, immediately upon the execution of this indenture and without any further action on the part of the Company be authenticated by the corporate Trustee. . . .

$12,931,000 face amount of the bonds shall from time to time on and after the execution of this indenture be authenticated . . . for the following uses and purposes. . . .

Section 3.—The remaining $15,000,000 face amount of the bonds shall from time to time be authenticated . . . except that in each instance the corporate Trustee shall receive, before authenticating and delivering said bonds or any of them, a certificate or certificates of the President or any Vice-President and of the Secretary or Treasurer or Auditor of the Company, stating as follows:

(a) That since May 1, 1909, property . . . has been acquired . . . or that betterments and improvements have been made. . . .

(b) That all of said property stated to have been acquired by the Company and all betterments and improvements stated to have been made upon the property of the Company have become subject to this indenture as a first lien thereon. . . .

(c) That for all amounts stated to have been expended for betterments or improvements upon the property of any subsidiary company or companies, notes therefor of the company for whose benefit such betterments or improvements shall have been made have been assigned and delivered to the Trustees. . . .

(d) That the prices paid for such betterments and improvements and for such property acquired were not in excess of the fair value of the work done or property acquired.

(e) That for all bonds reserved under the provisions of this Section 3 or the proceeds thereof in any way applied to or for the uses or purposes or benefit of any subsidiary company, notes or other obligations of such subsidiary company to at least the face value thereof have been taken by the Company and have been assigned and delivered to the Trustees, or are tendered, assigned, or delivered to the Trustees simultaneously with said certificate, to be held by the corporate Trustees under this indenture as part of the trust estate. . . .

Article Two

Particular Covenants of the Company

Section 1.—The Company covenants and agrees that it will duly and punctually pay or cause to be paid the principal and interest of every bond issued under this indenture at the times and places. . . .

Section 2.—All plants, lands, machinery . . . hereby conveyed or pledged, or covenanted to be conveyed or pledged . . . whether now owned or hereafter acquired by the Company, shall, immediately, or immediately upon the acquisition thereof by the Company, and without any further conveyance or assignment, become and be subject to the lien of this indenture. . . .

Section 3.—The Company covenants and agrees that coupon bonds Nos. 1 to 2,069, inclusive, shall be promptly used for the purpose of retiring and exchanging the present outstanding bonds of the Company to the amount of $2,069,000. . . .

Section 4.—The Company covenants that this indenture is and will always be kept a first lien upon the premises and property described or mentioned in the granting clauses hereof. . . .

The Company covenants and agrees that it will pay, when the same shall become due, all taxes and assessments. . . .

The Company further covenants and agrees that it will keep or cause to be kept the mortgaged premises . . . in good repair, working order and condition, and equipped with suitable machinery and appliances and will renew and replace the same . . . as may be necessary to such an extent that the general efficiency of said properties as a whole shall not be impaired and shall at all times be at least equal to their present standard. . . .

Section 5.—The Company agrees that it will keep all buildings, structures, machinery and equipment at any time covered by this indenture of a character usually insured by companies similarly

situated, insured against loss or damage by fire, to a reasonable amount, loss to be made payable to the Company and to the Trustees as interest may appear. . . .

SECTION 6.—The Company covenants and agrees that if it shall fail to perform any covenants contained in Sections 4 and 5 of this Article, the Trustees may . . . and all sums so advanced by the Trustees or either of them or by any one on their behalf are hereby declared to be a lien upon the trust estate, in priority to the bonds and coupons. . . .

SECTION 7.—The Company will not sanction or permit any issue of additional shares of capital stock of any company of whose outstanding capital stock a majority in amount is or shall be pledged or assigned hereunder, or the issue of any bonds or debentures by any such company or the creation of any mortgage or other lien upon the property of any such company . . . unless simultaneously there shall be made effective provision that such indebtedness and the evidences thereof and such bonds, debentures or notes issued and such mortgage or other lien and all such additional stock . . . forthwith upon the issue or creation thereof shall be delivered to and be pledged with the Trustees hereunder and be made subject to all the trusts of this indenture. . . .

SECTION 8.—The Company covenants and agrees that the surplus quick assets over the liabilities of the Company other than the outstanding bonds issued under this indenture shall always be equal at least to $8,000,000 so long as the said outstanding bonds shall equal or exceed $8,000,000. . . . By the phrase "quick assets" is meant cash in banks, on hand and in transit, good accounts and short time bills and notes or similar securities received on the sale of products; raw material, material in the process of being manufactured, manufactured products and supplies. . . . It is expressly understood and agreed that in the term "raw material" no ore, coal or limestone shall be included except such as has actually been mined. . . .

SECTION 9.—The Company covenants that . . . default . . . it will . . . disclose . . . to the Trustees secret processes and formulæ. . . .

ARTICLE THREE

CONTROL OF PLEDGED SECURITIES

SECTION 1.— . . . the Company shall forthwith deliver the same . . . to the corporate Trustee.

SECTION 3.—Unless and until . . . default . . . the Trustees shall not . . . collect the interest . . . and the dividends paid out of earnings. . . .

SECTION 5.—Unless and until . . . default . . . the Company shall have the right to vote for all purposes not contrary to its covenants . . . all share of stock assigned or pledged hereunder . . . and . . . the Trustees . . . shall execute and deliver . . . proxies to vote upon any shares of stock. . . .

ARTICLE FOUR

SINKING FUND AND REDEMPTION OF BONDS

SECTION 1.—The Company shall . . . deposit with the corporate Trustee a sum in cash sufficient to pay the semi-annual interest . . . and for the purpose of creating a sinking fund . . . deposit . . . an amount in cash (or in bonds as hereinafter provided) equal to the difference between $1,000,000 and the amounts required to pay the interest. . . .

ARTICLE FIVE

REMEDIES OF TRUSTEES AND BONDHOLDERS

SECTION 1.—If one or more of the following events, herein called the events of default, shall happen, that is to say:

(a) default . . . of interest . . . or . . . sinking fund . . . ;

(b) default . . . in the observance or performance of any other of the covenants. . . .

(c) an order shall be made for the appointment of a permanent receiver . . . ;

(d) any judgment or decree for a sum of money shall be entered against the Company and shall remain unsatisfied . . . then and in each and every case the individual Trustee, if the corporate Trustee deem it advisable . . . may enter into and upon all or any part of the lands. . . .

SECTION 7.—In event of any sale . . . the whole of the property subject to this indenture shall be sold in one parcel and as an entirety . . . unless the holders of a majority in amount of the bonds then outstanding shall in writing request the Trustees to cause said property to be sold in parcels. . . .

SECTION 18.—No holder of any bond or coupon shall have any right to institute any suit . . . unless such holder previously shall have

given to the corporate Trustee written notice of the Company's default . . . nor unless also the holders of ten per cent in amount of the bonds then outstanding shall have made written request upon the Trustees. . . .

Article Eight

Releases of Mortgaged Property

Section 1.—If at any time any property . . . cannot be advantageously used . . . the Trustees shall release the same from the lien and effect of this indenture upon the following provisions and conditions:

Article Nine

Possession until Default—Defeasance Clause

Section 1.—Until some default . . . the Company . . . shall be suffered and permitted to retain actual possession of all the property. . . .

Section 2.—If . . . the bonds . . . be paid . . . then . . . all property, rights and interests hereby conveyed . . . shall revert to the Company. . . .

Section 3.—If any of the bonds shall not, within six years after the date when the bonds shall have become due and payable be presented . . . or the amount . . . deposited with the corporate Trustee for payment thereof . . . not be claimed . . . the corporate Trustee shall, upon demand, pay over to the Company any amount so deposited.

Article Twelve

Parties in Interest

In Witness Whereof, Jones & Laughlin Steel Company has caused its corporate seal to be hereunto affixed and this indenture to be signed in its corporate name by. . . .

The Trustee.—As in the case of the bond agreement where there is no mortgage, the mortgage is not made to each individual bondholder. It usually covers all or a very large part of the property of the corporation. Its provisions, as already indicated, cover a large number of details and amount in some cases to hundreds of printed pages. It is not feasible to mortgage the corporation's property piecemeal. Hence, the cor-

poration makes one mortgage to secure a large number of bonds. The mortgage runs to a trustee who holds it for the benefit of all the bondholders. There are thus three parties to the corporate mortgage, viz., the corporation, the bondholders, and the trustee. The banker who buys the bonds in first instance dictates the choice of trustee, but the corporation mortgages the property in trust and pays the trustee's fees under the terms of the agreement.

Although it is customary to speak of *the* trustee under a mortgage, usually there are at least two trustees. One is a trust company which gives permanence to the trust and performs most of the functions. The other is an individual. The individual may be an employee of the trust company. It is customary to appoint an individual as well as a trust company because situations may arise in connection with property located in different states in which only an individual can function satisfactorily. In such cases, court actions are filed in the individual trustee's name.

Another point that deserves attention is the fact that although the trustee is authorized under the mortgage to declare the mortgage to be in default and proceed to take action against the corporation, the trustee does not ordinarily do so, unless it is compelled to by written request of the specified number of bondholders. The trustee does not care to borrow trouble, nor does it care to incur legal expenses without the direct guarantee of their payment by the bondholders. Further, any action by the trustee might bring unfavorable market reactions in the price of the bonds and thereby cause friction with the bondholders.

Recording.—In order to prevent more than one so-called first, second, etc., mortgage to be issued against the same property, mortgages are recorded in a public recording office. Ordinary real estate mortgages are recorded in the office of the county clerk and recorder. In the case of corporations, statutes permit some variations. In some states, mortgages can be filed with the secretary of state; in others, in the county where the principal business office is located; in others, record-

ing must take place wherever property is located. The effect of recording is to give notice to the world of the existence of the mortgage. Thus a dishonest mortgagor cannot foist several mortgages on persons by representing that each is a first mortgage to the same property. The prospective mortgagee can search the records and determine the facts for himself. If there is another mortgage which is unrecorded, it becomes a junior mortgage, provided the second mortgage is recorded first and provided the holder of the subsequent mortgage did not know of the existence of the unrecorded first mortgage. The mortgages rank in the order of recording. However, if the holder of the unrecorded first mortgage can prove (I say *prove* advisedly) that the holder of the subsequent mortgage knew of the existence of the first mortgage at the time of taking the second mortgage, then the second mortgage will not be prior to the first mortgage in spite of the earlier recording of the second mortgage.

Type of Property Covered.—The corporation usually mortgages all property which can be mortgaged. This means that the mortgage usually covers both real property and personal property now owned and to be acquired afterward. The extent to which the mortgage is actually effective in reaching all the property of a corporation varies from state to state. For example, in New York a trading corporation cannot effectively mortgage its after-acquired current assets to the detriment of unsecured creditors, but a public utility can do so. In addition to the peculiarities of law, there is a problem of recording. Real property mortgages must ordinarily be recorded in separate places from chattel mortgages. Hence, if the mortgage covers both real and personal property, it must be recorded in both places unless special statutes permit recording in a single place. In earlier times, the recording problem was one of the chief obstacles to the use of chattel mortgages in railway equipment financing. Under the earlier recording laws, it was necessary to record the mortgage in each county where the equipment was to be used. This involved prohibitive costs. Fortunately, statutes were passed to permit recording

equipment mortgages at the state capital for entire states, but there is still much room for improvement in recording acts governing other types of property.

Closed Mortgages.—For convenience, corporate mortgages may be classified in three groups: (1) closed mortgages, (2) limited open-end mortgages, and (3) open-end mortgages. Closed mortgages are mortgages against which all the bonds that can be issued have been issued. That is, no more bonds may be secured by the lien of this mortgage. Of course, a junior mortgage can be placed on the property and used to secure additional bonds, but the junior bondholders would receive nothing until the underlying mortgage bonds had been paid in full. In case of foreclosure, the first mortgage receives all the proceeds from the sale of the property until the first mortgage is paid in full. Then the second mortgage is paid off. Then if anything is left over, it is paid on the third mortgage, and so on. The closing of the mortgage, therefore, limits the amount of debt with reference to the value of the property so that there is more likelihood that the liquidation value will be sufficient to pay the debt in full. Closed mortgages can arise in several ways. The full amount of bonds authorized by the mortgage may be issued at once, thereby leaving room for no more bonds to be issued. A second mortgage may be placed on the property and contain provisions forbidding the issue of additional bonds under the first mortgage, even though by its terms the first mortgage would permit further issues. Bonds may be issued under limited open-end mortgage up to the limit specified. In all of these cases, the mortgage is closed.

Open-end Mortgages.—The open-end mortgage does not fix a maximum amount of bonds that can be issued, but rather limits the issue in terms of the economic protection of the bonds. It permits new issues of bonds up to a certain percentage of the value of new property acquired by the corporation. It restricts new issues so that the interest charges are always earned a certain number of times in terms of demonstrated earning power to date. It may require that the corporation maintain a favorable current asset or cash position.

Ultimately, these are the things that make the bonds good or bad. The mortgage is designed to permit the corporation to expand and yet to assure protection in economic values behind the bonds. If these relative restrictions are complied with, the bonds can be issued in unlimited amounts.

Limited Open-end Mortgages.—The limited open-end mortgage is a cross between an initially closed mortgage and an open-end mortgage. It gives leeway for the issue of additional bonds for purposes of expansion, but calls a halt to further issue when a set maximum amount of bonds has been issued. This type was historically the second in the series. Early mortgages were of the initially closed type. All bonds were issued at once, and no more could be issued with that mortgage as security. This type was adapted to railroad financing in the early stages of railroad development in this country. It is largely responsible for the welter of mortgages found in the railroad field as compared with those on local public utilities and industrials. The local public utilities started with closed mortgage structures, but their growth was so rapid, particularly in the electric light and power field, that bankers began to make provision in the mortgages for financing growth. Such provision first took the form of the limited open-end mortgage. However, the rapid growth of the industry fast outstripped estimates set up in the limited open-end mortgages. The company was still hampered. Finally, the bankers, apparently at the suggestion of Mr. Samuel Insull, developed a mortgage with no fixed limit as to amount of bonds that could be secured by it. This we have just called the open-end mortgage.

Position of Series.—It should be noted that if bonds are issued at different times and in different series, all series stand on the same footing and share foreclosure proceeds pro rata if they are secured by the same mortgage. Different series may have different maturity dates, different interest rates, and may vary in other details without preventing their sharing equally with other series on foreclosure of the mortgage.

After-Acquired Property Clauses.—For the better protection of the bondholders, it early became the practice to insert after-acquired property clauses in the mortgages. By these clauses, the corporation agreed that all property subsequently acquired by the corporation would become subject to the mortgage and thus provide additional shrinkage values for the protection of the bondholders. In the case of closed mortgages, these clauses tended to bring more property behind a never-increasing amount of bonded debt, thus making the debt better secured. However, in the case of open-end and limited open-end issues these clauses tended merely to maintain the existing standard of security by causing property purchased with the proceeds of additional bonds to come under the mortgage securing those additional bonds. These clauses are desirable from the bondholder's standpoint because they assure him that his bond will be protected. Thus, it would not be possible for a company to build a second plant, mortgage it to the hilt, and then abandon the first plant, leaving the bondholders having a mortgage on the first plant high and dry. The after-acquired property clause would prevent this by making the mortgage on the first plant attach to the second as soon as the corporation acquired the property. In contrast to the position of the bondholders, the corporation frequently finds itself hampered by after-acquired property clauses. Not infrequently, it terminates their operation by merging or amalgamating with another corporation or evades them by some device: The subject of evasion is discussed in a later chapter.

Complicated Mortgage Structures.—Present day business organizations have grown up more from the absorption of other corporations than from gradual growth. The process of putting several corporations into one larger corporation has produced many complicated financial structures. Others have been caused by the necessity of placing additional mortgages on properties after the limits of underlying mortgages had been reached. It not infrequently happens, therefore, that a mortgage will be a first mortgage on part of the property, a second mortgage on another part of the property, a third mortgage

on still another part of the property, and so on. This type of situation may be illustrated by the accompanying figure.

(A) is the main line of the railroad. (B) is a branch and (C) is a branch. (1) is a first mortgage on two-thirds of the main line, a second mortgage on the B branch, and a third mortgage on the C branch and a part of the main line. (2) is a first mortgage on the B branch. It would be known as a divisional lien because it mortgages only a division of the railroad. (3) is a first mortgage on a part of the main line

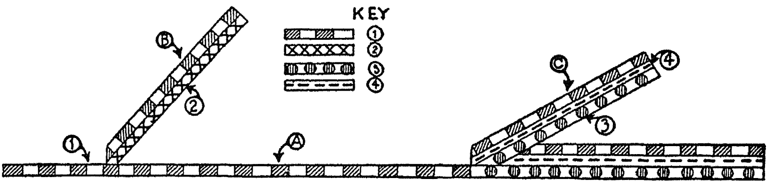

Figure 3. Diagram of a Railroad System

and on the C branch. (4) is a second mortgage on the C branch and a part of the main line. In case of liquidation, the different sections would be accounted for separately, and the proceeds applied to the mortgages in the order of their priority. In case of reorganization, the bondholders would be forced to make sacrifices in accordance with the relative weaknesses of their claims against the earning power of the sections. In case of failure, the receiver sets up separate books for the different sections so that the earning power applicable to each set of mortgages can be determined with some degree of accuracy.

Chattel Mortgages.—Mortgages which cover personal property are known as chattel mortgages. They take the form of a defeasible transfer of title as does the real estate mortgage, but they are far more simple and uninvolved. Also, as previously stated, they are normally recorded separately from real estate mortgages. Although corporations use individual chattel mortgages to some extent in acquiring property for their own use, such mortgages are more generally used in the course of selling goods to customers of the corporation. The chattel mortgage differs from the pledge in that, under the

mortgage, the mortgagor retains possession; whereas, under the pledge, he must deliver possession to the lender or to some party who holds for the lender. If possession is surrendered by the lender, the pledge is terminated. The mortgage continues in force, regardless of the surrender of possession.

Purchase Money Mortgages.—In purchasing property, payment is sometimes made by giving the seller a part of the consideration in cash and the balance in the form of a note secured by mortgage. The mortgage used in making payment for the property in first instance is called a purchase money mortgage because it is used in lieu of part of the purchase money. The purchase money mortgage transaction has certain peculiarities. It is held that the mortgage attaches to the property at the instant of transfer so that the property comes into the hands of the purchaser with the mortgage already on it. This means that the purchase money mortgage can be used to evade the after-acquired property clauses in a corporate mortgage. By paying for property with a purchase money mortgage, the corporation can give a good first mortgage on the new property. The after-acquired property clause will bring under the old mortgage only the equity of the corporation above the purchase money mortgage. The clause cannot reach a greater interest than the corporation has in the new property.

Assumed or Subject To.—When a person or corporation purchases property against which a mortgage is already outstanding, he may take the property *subject* to the existing encumbrance, or he may *assume* the obligation against the property. In either case, he must pay the interest on the debt and pay the principal at maturity, unless he wishes to permit the mortgagee to foreclose and sell the property out from under his equity. But here the similarities of the two methods of purchase cease. If the purchaser buys *subject to* the mortgage, he merely takes title with the mortgage still outstanding against the property and without promising to pay the debt. But he has the right to pay the debt if he wants to. If the property becomes worth less than the amount of the mortgage debt, he can refuse to make any further payments. Then if the prop-

erty sells for less than the debt on foreclosure, the mortgage holder cannot hold the purchaser for the deficiency. The mortgage holder's only redress is to sue the person who originally borrowed the money. On the other hand, the purchaser who *assumes* the mortgage agrees to pay the debt. He can be held like the original borrower for any deficiency on foreclosure. In Pennsylvania, the purchaser must make the assumption promise directly to the holder of the mortgage if the mortgage holder is to enforce it; otherwise, the original borrower to whom the promise was made will have to enforce payment of the deficiency. However, in most jurisdictions, the mortgage holder can hold the person who assumed the mortgage for the deficiency directly on the basis of his promise to the original borrower.

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CHAPTER 8

SECURED DEBT

Other Forms of Security.—The mortgage is not the only method of protecting creditors against loss. A variety of other methods have been used. These include the use of leases, conditional sales agreements, trust receipts, pledges of collateral, and promises to give ratable security in case the properties are later mortgaged. These legal devices are discussed in this chapter.

Collateral Trust Indentures.—Holding corporations, whose assets include large amounts of securities of other corporations, frequently better secure the bondholders by pledging the securities that they hold, as collateral under the bond indenture. It would be possible to mortgage securities and leave them in the hands of the borrowing corporation, but the moral hazards are such that it is not ordinarily desirable to leave in the hands of the corporate managers, negotiable and quasi-negotiable securities that have already been borrowed against. Hence, it is customary for the corporation to deliver them to a trustee to hold for the protection of the bondholders. Too much grief has come from cases in which the corporation executives have sold bonds against securities and then turned around and pledged the same securities with banks in order to secure bank loans, for loose arrangements to persist in these matters.

After securities are turned over to the trustee under the bond indenture, the corporation is permitted to act with reference to them quite as though they had not been deposited. It is permitted to receive the interest and dividends paid on the collateral, provided it has not defaulted on its own bonds. However, payments of principal are made to the trustee and not to the corporation. This safeguard is necessary to protect the security behind the collateral trust bonds. In the case of

voting stocks of subsidiaries, directors' qualifying shares are carried in the names of directors designated by the corporation. The proxies for other shares are turned over to the corporation with the right to vote them on all routine matters of corporate policy. However, in case of fundamental changes of the subsidiary company structures, the right to vote the shares is usually restricted. If new bonds are voted for the subsidiary, it is common to require that they be deposited as further collateral under the collateral trust indenture. If the voting stock of the subsidiary is increased, it is common to provide that it shall be deposited under the collateral trust bond. In no event should the indenture permit non-deposited stock increases to shift control from the collateral trust issue. It is also common to provide that no proxy shall be voted for a purpose inconsistent with the mortgage and that the trustee shall vote all proxies during defaults. Other types of provisions cover amalgamation, merger, sale of assets, reorganization, stock dividends, and inspection of books of the subsidiary corporation.

The covenants may provide that no more bonds of equal rank shall be issued against the same collateral. However, if the corporation is a growing enterprise, or has pledged the securities of a growing enterprise, some method must be found for financing that growth. This provision can be made by making the collateral trust issue limited open end or open end. New bonds can then be issued to provide funds for the expansion of underlying companies. The underlying companies can then issue securities to the parent company in payment for the new funds and the parent can pledge the new securities of the subsidiaries under the collateral trust indenture. Naturally a well-drawn collateral trust indenture will not permit all the expansion funds to be provided by the sale of bonds. Such a policy would ultimately cause an excessive amount of bonds to be outstanding. Hence, bonds are restricted to a ratio of the new capital provided and are issued only on proper evidence of the expenditures by the subsidiaries.

In the early collateral trust agreements, provision was not ordinarily made for substitution of collateral. But in the

1920's, substitution provisions became very common. The substitution provisions give greater flexibility to the holding company structure, because securities can be withdrawn and others substituted in their place. Such flexibility permitted the regrouping of public utility properties and the shifting of them from one holding company group to another. Large area companies were thus built up. The trouble with a substitution provision is that it is difficult to make the provision foolproof. Some of the earlier provisions permitted the release of collateral only if United States Government bonds were substituted in the amount of the par value of bonds released as collateral, or in the amount of the value of stock released. This type of provision was harsh on the corporation in that the rate of interest on government bonds was ordinarily less than the rate paid by the corporation on the collateral trust bonds. Thus the corporation was in effect borrowing money at, say, 6%, and using it to carry government bonds paying, say, 4%. It would have been better to have made the collateral trust bonds callable and to have provided for the calling of an amount of bonds equal to the value or a ratio of the value of collateral released.

From the rigid type of substitution provision mentioned above, the financial community went to the opposite extreme of permitting substitution of securities if the market value of the new securities was equal to that of the released securities or was a specified percentage of the collateral trust debt. That type of provision proved disastrous to the investor because substitutions could be made when the substituted securities were selling in the markets at excessive, if not highly artificial, prices.

As a general procedure, it is probably desirable to limit carefully the powers of substitution. Provision can be made for the calling of a portion of the old issue, in case collateral should be released. As a general procedure, it is probably also desirable to limit the issue of additional collateral trust bonds under the same indenture to such amounts as are necessary to finance the subsidiaries whose securities are already pledged. If other subsidiaries are to be acquired, their securities can be

pledged under a new indenture. The holding corporation may not be able to give as great diversification of collateral as would otherwise be possible, but the hazards to the bondholders would be materially reduced. In addition to these safeguards, a good collateral trust indenture should cover collateral of independent value. If the securities pledged are those of an incomplete business unit, or one so interwoven with others that it could not be sold on an independent basis, it is obvious that the collateral trust bondholder could realize little in event of a forced sale of the collateral backing his bond.

Negative Security.—Debenture bonds are ordinarily more than a mere promise to pay. They usually contain a vast amount of detail which restricts the corporation. A common restriction is to provide that, if the corporation places a mortgage on its premises after the bonds are issued, it will secure the present issue ratably with the new one. This type of provision is likewise made applicable to the giving of collateral security. However, the corporation is usually permitted to pledge securities on short-term loans in the regular course of business without bringing this clause into operation. This exception has usually proved the weak spot in the negative provision. When a company gets into difficulties, it normally first exhausts its short-term credit. By the time a severe failure is in prospect, its collateral has already been pledged under the exception, and the debenture holders are left with scant protection. However, such restrictions should be inserted for what little protection they do afford. As will be pointed out in a later chapter, these clauses can also be evaded by the use of subsidiary corporations.

Lease.—A number of devices have developed to permit corporations or individuals of doubtful credit to purchase equipment. Among these is the lease. It has been very thoroughly tested in the railroad field, and its use there offers as good illustrations as any. However, it is used extensively in connection with the sale of boats, of durable goods to consumers, and of machinery to manufacturing corporations.

The lease scheme is simple. Instead of selling the property

to the corporation, it is leased to the corporation. The corporation makes an initial payment which will cover any near-term depreciation in the value of the equipment. It then pays rental installments which cover interest on the investment in the equipment plus a part of the principal. The principal is paid off much faster than the equipment depreciates. Thus the lessor is protected against loss. The contract provides that, when a specified amount has been paid in rentals, the lessor will sell the property for a nominal sum. This arrangement has the advantage that the corporation is not given title to the property until it is paid for; so creditors are not able to seize it in satisfaction of other debts of the corporation. Further, since the remaining rental payments are usually far less in amount than the equipment is worth, the company cannot afford to default on payments and lose the right to complete the payments and purchase the equipment. If the company is thrown into receivership, the creditors will be eager to have the receiver continue payments so that they can realize the equity that the corporation has in the lease contract. The fact that the corporation does not have title to the equipment also strengthens the lessor's position legally, if the corporation goes into receivership or bankruptcy. It also prevents after-acquired property clauses from attaching to the property. Hence, this is a common device for financing when after-acquired property clauses hamper the borrowing of money directly.

Financing the Leased Property.—It is obvious that somebody must supply the funds that are tied up in the property which is being paid for under the agreement. The manufacturer can carry the burden if he has sufficient free funds to permit him to replace inventories and pay operating expenses in repeating the process; but usually he needs the payment from the first equipment in order to finance further manufacturing operations. In this case, he can place a mortgage on the equipment subject to the lease and pledge the lease contract under the indenture. Then he can sell bonds to the public to raise the difference between the purchase price and the initial payment of the corporation purchasing the equipment under

the lease scheme. Or he may sell certificates of participation in a trust to which he transfers the equipment and the lease contract. The lessee of the equipment is protected because the lease will have priority over any mortgage subsequently placed on the property. Hence, the company purchasing the equipment under the terms of the lease can always live up to the agreement and secure title to the equipment. The bondholder or certificate holder is protected in that he can enforce the terms of the lease and can always get property worth more than the amount of the bonds or certificates outstanding. Usually bonds issued under equipment trust plans mature serially. That is, they are paid off with that part of the rental payments, which is in excess of interest requirements. In this way, the debt against the equipment trust is reduced periodically. The accompanying diagram will show how the economic protection of the bondholders enhances as time passes.

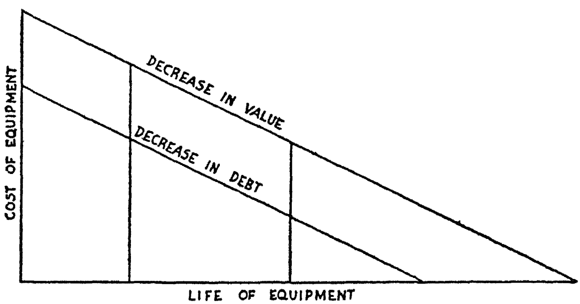

Figure 4. Diagram Showing Valuation of Equipment

The vertical readings show the ratio of debt to remaining value of equipment. The debt at the start is 75% of the value of the equipment. At the point where the last horizontal line is drawn, the debt is less than 50% of the total value of the equipment. The equipment will have several years of life after the entire debt has been paid off.

If the property is subject to insurable hazards, the lease agreement may provide that the lessee carry insurance on it, the insurance to be payable to the lessor. Provision for proper maintenance and repairs will be made. Clauses will cover the

replacement of lost or destroyed equipment. Other clauses will cover the maintenance of name plates and other means of identification. As much care should be used in drawing the lease as in drawing the mortgage. Many of the problems are the same.

Conditional Sale.—The conditional sale method proceeds on the same theory as the lease, that is, the title is to be withheld from the company until the equipment is paid for. In this way, after-acquired property clauses are evaded, and the equipment can be financed on an independent basis. The essence of the conditional sale is that title to the equipment, by the terms of the contract of sale, does not pass to the purchaser until the last payment has been made. The purchaser makes an initial payment in excess of any near-term depreciation of the equipment. The installments then pay off the balance faster than the property loses value. The conditional sale contract and the property subject to the contract can be mortgaged in the same way that a lease and the property subject to it can be mortgaged. Bonds can then be sold to the public in the same way. Other details of the procedure will be the same. The only practical distinction between the lease and conditional sales methods is that they use different legal principles for a common end. In some jurisdictions, the conditional sale method is not so strong legally as is the lease method. Hence, the lease method is more generally used in the railroad equipment field. Other types of property are sold on methods best adapted to the particular jurisdiction. Recording laws frequently require that conditional sale agreements be recorded. This may not be the case with leases. Hence, there is a recording advantage in favor of the lease. Though Pennsylvania now has a statute dealing with conditional sales, it formerly did not recognize them. It did recognize the lease transactions. Consequently, Pennsylvania was the cradle of the lease method. It was first used on canal boats in the early 1800's and later adapted to all types of transactions. The lease method has come to be known as the Philadelphia plan. In contrast, the conditional sale method developed in New York

and is known in the railroad equipment field as the New Yor plan. The purchase money chattel mortgage has also been use in the railroad field since modern recording statutes wer adopted. However, the lease method is still the most commo method of financing equipment in this field.

Title Documents.—The seller of goods frequently wishe to retain title and control over them until he is paid. Thi can be done in certain classes of cases by retaining title docu ments. The order bill of lading issued by transportation com panies is a title document. The order bill of lading makes th goods deliverable to the party named in the bill or to his order The transportation company will not deliver them withou surrender of this bill. Hence, by retaining the bill, the selle can retain title until the goods are paid for. It is common t attach a draft to the bill of lading and send the draft throug regular banking channels for collection. On payment of th draft, the bank presenting the draft for payment will releas the bill of lading. The bill of lading can be pledged with th bank to secure a loan, but ordinarily the goods must b removed from the transportation company promptly. In thi case, the goods are stored in a warehouse and a negotiabl warehouse receipt secured. The warehouse receipt can then b pledged with the bank or other creditor. The negotiable ware house receipt carries title to the goods, and the warehouse wi not deliver the goods without surrender of the receipt. The us of the documents thus affords a means of securing lenders Automobile title laws are fast giving us another type of titl security. However, in all cases, care must be exercised t insure that the document really carries title. A straight bill o lading or a non-negotiable warehouse receipt is not suitabl security for a loan. The transportation company or ware houseman can legally deliver the goods without surrender o the *non-negotiable* receipts.

Trust Receipt.—The trust receipt is used both in connec tion with title document transactions and as an independen security. In connection with bill of lading and warehouse re ceipt transactions, the bill of lading is released in trust to th

purchaser of the goods to permit storage of goods in the warehouse. The trust receipt merely recites that the signer (the purchaser) has received the documents as the property of the party for whose account the trust receipt was issued. This procedure prevents legal title from vesting in the purchaser. However, because the documents released are negotiable, the purchaser can wrongfully negotiate them and give good title to a third party. The trust receipt is of little protection in cases of dishonesty. It serves primarily to prevent one creditor from levying on goods supplied by another creditor.

In addition to its use in releasing documents temporarily, the trust receipt is also used as an independent method of securing creditors. The goods themselves may be released under a trust receipt. Thus an automobile sales company might buy cars from the manufacturer. Since it did not have sufficient capital to pay for the cars, it might arrange with a finance company to put up part of the purchase price. The manufacturer would then draw a draft on the finance company, attach the bill of lading to the draft, and forward both of them for payment. The finance company would pay the draft, detach the bill of lading, and release it on trust receipt to the sales company. In the trust receipt, the sales company would recite that it held the goods as property of the finance company. Title would never pass to the finance company until the terms of the agreement had been met. However, the agreement would provide for resale of the cars and the turning over of the proceeds to the finance company. This would make the sales company virtually an agent of the finance company in selling the cars. Hence, the purchaser would be protected and would receive good title to any car he purchased. And if the sales company misappropriated the purchase money, the finance company rather than the purchaser would bear the loss because the finance company had placed the sales company in a position to divest it of title. The moral hazard is great in this type of security. However, where the party is strictly honest, but of poor credit, the trust receipt performs a very useful function. In the poor credit case, the chief concern of the seller is to prevent the other creditors of the business from levying on the

goods that he delivers. The purchaser's business can go on. He can sell goods and not only pay for them, but make a profit. But if old standing creditors levy on all new goods he puts in inventory, he cannot get companies to supply new goods on credit, nor can he work out of a bad situation. The trust receipt partially meets this problem. It leaves title in the financing party. That title can be wrongfully divested by the purchaser, but the creditors cannot levy on the goods because they cannot reach any better interest in the goods than the purchaser has. Thus the creditors are held at bay.

A few cautions are in point. The legal status of the trust receipt is far from settled in some jurisdictions. In some, it is considered a subterfuge to take the place of a chattel mortgage and must be recorded to be effective. Secondly, a trust receipt cannot validly arise by having the purchaser go to a bank and sign such a receipt after he has received title to the goods. Title can never vest in the purchaser before the trust receipt is uttered; otherwise, the whole transaction will be defective. This type of transaction would be a clear case of evasion of chattel mortgage statutes, and the courts would hold it invalid as a trust receipt transaction. Correct procedure is for the title to go to the bank or finance company via bill of lading and then possession of the goods go to the purchaser from the bank via the trust receipt.

Although the trust receipt has been used extensively in the automobile trade, it was developed and finds its chief use in foreign trade transactions. Banks that finance importations of foreign goods use the trust receipt on a considerable scale.

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CHAPTER 9

EXTINCTION OF BONDS

Extinction of bonds covers methods of eliminating particular bond obligations. Such elimination may be by operation of sinking funds, by serial retirement, by refunding, by conversion, or by bulk payment at maturity. The necessity for extinguishing debt varies with the circumstances of the corporation. In some cases, debt should be eliminated entirely within a rather definite period of time; in other cases, it might well be practically permanent. Bonds against minerals, timber, and like natural resources should obviously be paid off as the resources are exhausted. Steamship and railroad equipment bonds should be eliminated as the ships or equipment decreases in value. What has been said as to mining resources should likewise apply to bonds issued against fixed property in the community. Power company property, railroad branches, and so forth, will be of negligible value after the resources of a mining community have been exhausted. Provision should be made for the payment of bonds on such properties just as though the bonds were issued against the mining resource itself. On the other hand, bonds of permanent companies in permanent communities might well be put out for long periods of time because of the long-term demand for the service of such companies. However, where the visibility of future demand for services or products is bad, as is the case of securities of public utility companies in the Tennessee Valley Authority area, progressive debt reduction is a desirable protection for the lender. If visibility later becomes better, it is always possible to sell more bonds, but in the meantime the investor has been protected. What is here mentioned is reduction of indebtedness, as well as extinction of bonds. Reduction of indebtedness is sometimes distinguished from extinction of bonds because some forms of bond extinction merely result

in the substitution of one bond issue for another without any reduction in the total indebtedness of the corporation.

Sinking Funds.—The sinking fund provision is one of the most common provisions in bond indentures. Originally, sinking fund provisions provided for the creation of a fund for the ultimate payment of the bonds. Today the phrase, sinking fund, has taken on a much broader significance. It covers not only funds set aside for ultimate retirement of the bonds but funds which are used immediately to retire some of the bonds.

Sinking fund provisions are ordinarily inserted in bond indentures for one of three reasons: (1) to provide for the ultimate repayment of the loan, or (2) to strengthen the ratio of debt to property, or (3) to assist in maintaining the market price of the bond issue. If the object of the provision is to provide means for paying the debt, the funds may be set aside in a cash deposit until required, invested in marketable securities, or used directly to retire the debt as funds become available. If the object is to strengthen the ratio of debt to property, the funds will be used to purchase bonds of the same issue or underlying bonds or to purchase additional property. If the object is to maintain the market price of the present issue, the funds will be used to purchase bonds of the present issue in the open market and thus reduce the floating supply. It is obvious that the chief purpose of a sinking fund for an open-end mortgage issue is to maintain the market price of the issue. Otherwise, why should the provisions be so drawn that the company will be putting out new series of bonds secured by the same mortgage when it is paying off, through sinking funds, other bonds secured by that mortgage? Bankers insert a sinking fund provision in these cases because it provides for purchase of a definite amount of bonds which will be taken permanently out of the market. This helps maintain the price and thereby keeps a satisfied clientele for the banker who sold the bonds.

Sinking fund provisions which require large sums of money to be set aside against the ultimate retirement of the bonds are generally uneconomical. A cash deposit cannot ordinarily

earn as much return as the interest the company is paying on the bonds it is to retire. It would be far more economical to pay off the bonds immediately and stop the interest payments. Also, unless the fund is safeguarded, it may be misappropriated so that the bondholders will not be protected after all. Private bond indentures usually provide that sinking funds be placed in the hands of the trustee under the indenture. Sinking funds in government bonds have had a scandalous history. Today government bonds tend to be of the serial maturity type and thus avoid sinking funds.

Sinking fund provisions which permit the money to be invested in outside securities are also undesirable. First, it is difficult to get as high a return on an outside investment as the interest rate being paid for the use of the funds. Second, there are substantial risks connected with outside investments which may result in ultimate loss to the company. The executives may be excellent managers of a steel mill but very poor investment analysts. The results may be disastrous. Further, the securities may be misappropriated if not carefully safeguarded by restrictive covenants.

The sinking fund invested in underlying bonds is satisfactory if it is set up properly. It reduces the prior debt and makes the present issue much nearer a first mortgage, nearer the rails, as they say of railroad obligations. However, the underlying bonds should be kept alive in the sinking fund until the entire underlying issue is redeemed. They should not be canceled. This can be readily illustrated by the following example: suppose property is worth $1,500,000, that there is a first mortgage for $500,000 and a second mortgage for $500,000 with a sinking fund provision in the second mortgage for the redemption and cancellation of the first mortgage bonds. $200,000 of the first mortgage bonds are purchased and canceled. Later the property is liquidated for $400,000. In the liquidation, the remaining $300,000 of the first mortgage bonds will be paid in full and the second mortgage bondholders will receive $100,000 or 20 cents on the dollar. However, if the first mortgage bonds had been kept alive in the sinking fund for the second mortgage bonds, the trustee of the second

mortgage bonds could have presented them for payment on equal terms with the other first mortgage bonds. The second mortgage bondholders would then have received two-fifths of the $400,000 obtained in the liquidation. Thus, they would have received $160,000 instead of $100,000. Their return per dollar would have been 32 cents instead of 20 cents.

Sinking funds may also be reinvested in the property. This process decreases the ratio of debt to property and gives an additional margin of possible shrinkage before the bondholders will be injured by decreasing property values. This method may be of limited protection because the costs of the added property may be padded or because the betterments may be entirely unproductive of earnings.

Amount of Annual Sinking Fund Requirement.—The amount of the annual requirement may be determined in a number of ways. It may be a fixed annual amount or an amount which varies with some changing base. The fixed amount assures the bondholder that the debt will be reduced or provided for on a definite calculable scale. It may be asked, why provide a sinking fund if this is to be done? Why not make the bonds come due in series? Why not let the amount of bonds specified in the sinking fund come due each year? The answer is that the breaking of the issue into many series would make each different maturity sell as a separate issue. Thus when this type of provision is used, the marketability would be limited by the size of the issue, as well as by the lack of speculative possibility that the bonds might be called for sinking fund at a slight premium when this type of provision is used. There is a certain speculative appeal to the sinking fund provision which provides for the use of the sinking fund installment to purchase bonds of the same issue, the bonds to be called at a premium if sufficient tenders are not made below the call price. In Europe, governments frequently provide for the calling of a few bonds at several times their par in order to induce the individual purchaser to pay a better price in hope that he may be the lucky holder of the called bond. Further, waiving the speculative attraction, if certain bonds were speci-

fied for payment, the banker would be unable to support the market for the issue in times of market weakness and then tender the bonds to the sinking fund. Nevertheless, as explained later, serial maturities are used considerably in connection with government, railroad equipment, and steamship financing. Here, the maturity can be adjusted to the receipt of revenue or the deterioration of the property.

Variable Sinking Funds.—The variable sinking fund payment is set up on a variety of bases. It may be based on gross revenues, net income, traffic, tonnage, or expenditures of certain types. To be of any significant protection to the bondholder, the variable sinking fund must be compulsory. If it depends on the whim of the directors, stockholder interests will control when those interests are antagonistic to bondholder interests. The compulsory sinking fund is made variable primarily to meet the economics of the particular type of company. Thus, in the case of a mining company, the company would be embarrassed by having heavy fixed sinking fund payments during slack phases of the business cycle, and the bondholder might find his security depleted if the minerals were taken from the ground faster than the fixed sinking fund payments made good the loss. To meet this situation, the bond indenture should provide for payments to sinking fund on a basis of the tonnage mined. Timber could be treated the same way. Obviously, a serial bond issue would be no more satisfactory in this case than would a fixed sinking fund provision. The net income type of provision is designed to prevent financial embarrassment of the company by providing that there shall be no payment until after expenses and bond interest have been provided for. Of course, the terms of variable sinking fund provisions are limited only by human ingenuity.

Sources of Sinking Funds.—Sinking funds are normally set up out of the earnings of the business. Each year the directors set aside the amounts required instead of paying them out as dividends. However, in the public utility field it has been common to sell junior securities to obtain funds to meet sinking fund requirements. This practice is of no con-

cern to the bondholder. His concern is that funds shall be provided to reduce the amount of the debt or increase the property behind the debt. If the corporation prefers to sell stock which will be junior to the bonds rather than to reinvest earnings, that is not the bondholder's concern. Only should the stock issues tend to influence dividend policies to the extent of draining away too much cash and thus embarrassing the corporation, would the bondholder care.

Sinking Fund Reserves.—As has been indicated, the sinking fund is a fund of assets, resources earmarked for a definite purpose. The sinking fund is sometimes confused with the sinking fund reserve. The sinking fund reserve is merely a bookkeeping entry which indicates that a portion of the surplus earnings of the business have been earmarked for the retirement of the bonds and are not available for dividends or other corporate purposes. The sinking fund reserve is a surplus reserve because the funds which it offsets represent an excess of assets over liabilities plus stated value of the capital stock. After the funds have been applied to reduce the amount of bonds outstanding, the assets and bonded debt will be reduced; but the excess of assets over liabilities plus the stated value of the capital stock will remain the same. Sinking funds obtained by the sale of stock or junior bonds will not give rise to a sinking fund reserve on the books of the company. Neither will they result in an increase of surplus because an equivalent amount of stock or junior bonds will be added to the liability side of the balance sheet.

Serial Redemption.—As indicated, serial redemption splits a bond issue into several small issues. Since changing interest rates affect the prices according to maturities, the different maturities tend to sell at different prices. If they were originally sold at a price differing from par, they would have been priced differently from the start. Only for brief periods in the business cycle are interest rates for differing periods sufficiently close together to make all series sell together. Despite the handicaps of serial issues, they are, as already stated, used in several important lines. In the railroad field, the bulk of

equipment obligations is sold to institutional investors. They purchase on a yield basis and are not particularly concerned with the marketability feature previously discussed. In fact, the demand is so good for this type of security that the marketability influence of the size of the issue is unimportant. In the government field, the hazards of political dishonesty are such that a sinking fund is impracticable. Serial redemption seems to be the best way to prevent theft and insure that government projects are paid for during their lifetime. In the steamship field, deterioration in the property is both regular and persistent and thus lends itself to this type of issue. For the most part, serial redemption is desirable only when specific assets such as ships, or equipment, stand behind the particular liability, when such assets decrease in value during the lifetime of the debt, and when the decrease in value is at an orderly rate. As has been noted, serial redemption is undesirable when depletion of assets is irregular as in mining.

Refunding.—Refunding is accomplished by selling a new issue of bonds to pay off an old one. The bonds may be sold to the general public for cash, and the cash used to pay the old issue at maturity or when called. Or the bonds may be offered to the old bondholders in exchange for their holdings. Refunding is common among permanent corporations. The same conditions which in the first instance dictated the desirability of borrowing usually dictate a continuance of borrowing. In the public utility fields, where large amounts of capital have been sunk to produce a relatively small annual return, earnings are not sufficient to provide for expansion, let alone pay off old bond issues. The ratio of property to annual gross revenues in the electric light and power industry is commonly $5 of plant for every $1 of gross revenue. The dollar of gross revenue must pay all operating expenses, interest, and dividends. From 1902 (the date of the first census of the industry) to 1927, the electric power industry doubled every five years. Had no operating expenses, interest, or dividends been paid, the industry would have been just able to finance expansion from gross revenues. Obviously, in such industries

most debt must be refunded. The only alternative is sale of stock, and this reduces the advantages obtained by trading on the equity. Not only this, but serious losses may result from the sale of stock because the stock market may be temporarily unfavorable when the bond market is favorable to the sale of a refunding issue.

Bonds may be refunded before maturity. Such refunding is ordinarily undertaken for one of two reasons: (1) to reduce interest charges and (2) to avoid restrictive covenants. Interest charges may be reduced by taking advantage of lower prevailing interest rates or by strengthening the financial structure of the corporation. If a corporation has issued bonds when prevailing interest rates were at 6% and the market rate is now 4%, it would pay the corporation to call in the old issue and replace it with a new one, provided it had sufficient time to run so that the banker's commissions and the call price could be saved through the difference in interest rates. This can be noted in this example in which high interest rates are assumed.

Assume that the amount of the outstanding issue is $1,000,000, that it bears 6% interest, is callable at 110, and has 70 years to run. A new issue sufficient to pay off the old issue and running likewise for 70 years can be sold to bankers at 80 if it bears 4% interest and provides for the retirement of the amount issued in excess of $1,000,000 in equal annual installments over the life of the issue.

In this problem, the comparative future costs are as follows:

Old issue

Principal due in 70 years	$1,000,000.00
Annual interest	60,000.00

New issue

Principal due in 70 years	1,000,000.00
Annual interest on $1,000,000 @ 4%	40,000.00
Annual amortization burden	16,029.41

(The annual amortization burden is found as follows:

$$\text{Amount of new issue} = \frac{\text{amount of old issue times call price}}{\text{price of new issue}}$$

$$= \frac{\$1{,}000{,}000 \text{ times } 110}{80}$$

$$= \$1{,}375{,}000$$

Amount to be amortized = amount of new issue minus amount of old issue
= $1,375,000 minus $1,000,000
= $375,000

Annual amortization burden = amount to be amortized times the amortization factor
= $375,000 times .0427451
= $16,029.41

The amortization factor is the percentage of the amount to be amortized which must be set aside each year to pay interest and principal by maturity. (Tables are given in mathematics of finance books.) The principal due in 70 years is the same, that is, $1,000,000 for both issues; so that item does not affect the comparison. Therefore, the saving resolves itself into a comparison of the annual interest on the old issue and the interest plus amortization on the new issue. Hence, the annual saving is $60,000 minus ($40,000 plus $16,029.41) or $3,970.59. If it is desired to determine the saving over the 70-year life of the issue, the present worth of an annuity of $3,970.59 for 70 years at the present effective rate of interest can be found.

This problem has been worked on the basis of a small issue of bonds. However, in actual refunding operations the amounts involved are usually much more substantial and the aggregate savings proportionally greater.

Sometimes the financial structure of a corporation is exceedingly complex. In the course of growing, the corporation has created a welter of intermingled liens on its properties. These puzzle the investor. Other things being equal, the investor will purchase a security he understands in preference to one that he does not understand. Because of this tendency the corporation must pay a higher rate of interest to attract investors to its complicated securities. Hence, if the corporation can put through a refunding operation and strip its properties clean, it may be able to replace a multitude of issues with a single large issue that can readily be understood by the investor. Since the new issue can be understood, it will be

salable at a lower rate of interest. This matter is also touched on in the chapters dealing with consolidations.

Corporations are also crippled by restrictive provisions in bond issues. They not infrequently fail to foresee their future growth requirements and enter into unwise restrictions on their right to borrow, consolidate, or engage in certain lines of business. Whenever such restrictions cramp too severely, the corporation can always rid itself of the restrictions by calling the issue for payment and starting its financial structure over again.

Refunding at Unfavorable Times.—In every depression period, some companies are caught with important bond maturities. They may have to pay off 4% bonds when it costs 6% to borrow. The conversion of a substantial amount of low rate debt into high rate debt seriously depletes the earnings available for common stock. Usually it is unsafe to borrow on short-term notes because recovery may not have sufficiently restored earning power to permit the corporation to handle the maturity of the short-term notes. Such notes constitute a constant threat to the corporation's solvency. Therefore, in many instances it is preferable to sell long-term bonds at the high interest rates. In such cases the bonds should be made callable at a slight premium, and the interest rate be made high enough to make them salable at or above par. Then when the corporation's credit is restored and interest rates have fallen, the company can refund the issue at a minimum cost. It is better to sell a 20-year, 6% issue at par than to sell a 20-year, 4% issue at 77. If the first is to be refunded in two years at 102, the company will have to absorb merely the 2-point premium. If the latter is to be refunded, the company will have to absorb 25 points of discount and premium. Obviously, the thing to do is to anticipate this refunding and offer the higher rate at the start. The extra 2% for two years is slight compensation for the 23 points discount on the 4's.

Conversion.—Bonds having the conversion privilege are ordinarily convertible into stock rather than into other bonds.

Conversion is ordinarily at the option of the holder of the bond and not at the option of the corporation, though there are exceptions. Conversion into stock not only eliminates the particular bonds but also the debt, since a creditor interest has been turned into an ownership interest. Because the bondholder looks upon the conversion privilege as a means of sharing in the future prosperity of the company or as a hedge against inflation, he will not ordinarily exercise the privilege unless he can gain thereby. Since the bond will go up with the stock, the market value of the bond will reflect the speculative gain without conversion. Thus a $1,000 bond convertible into 20 shares of stock will go to a price of at least $1,200 if the stock sells at $60 a share because the holder can get stock worth $1,200 by its conversion. Usually the bond will sell at a slightly higher price because it has the added value incident to being a prior charge security. It will be converted only if the return on the stock is sufficiently greater than the return on the bond to compensate for shifting from a prior charge to a junior security. It will also be converted if it is called for payment at a price below the conversion value. The problem of figuring whether it pays to convert or not is simple. The bondholder merely determines how many shares of stock his bond will receive on conversion. He multiplies the price per share by the number of shares. Finally, he compares the aggregate value thus obtained with the price of the bond. If the aggregate value is above the bond price, it will pay to convert. If he wishes to find out at what price the stock will have to sell for the conversion privilege to be of value, he divides the number of shares obtainable into the price of the bond. He can then estimate whether the stock will reach that price and thus determine whether the conversion privilege is likely to have any value to him. Although on the down side of the market, he can expect the price of his bond to separate from that of the stock and cease falling with the stock when the bond reaches an investment basis free from the conversion element, he can expect the price of the bond to stay at or slightly above the conversion ratio on the up side. The bond price cannot fall below the conversion ratio because short

sellers will sell stock and buy bonds whenever there is a profit in purchasing bonds and converting them into stock. Since they sell the stock short at the time that they buy the bonds, they do not have to risk the change in prices that might take place if they were buying at one time and selling at another.

It is not uncommon for a corporation to get a heavily bonded structure back into balance by the issue of convertible bonds. These are made callable at a low call price, say 102. As the stock price rises to a point where the conversion value of the bond is above the call price, the corporation calls the bonds for payment. Since the investor will suffer a loss if the bonds are paid in cash rather than converted, he will convert. In this way, the corporation forces the conversion of a large portion of its debt into stock. Youngstown Sheet and Tube Company and New York Central Railroad Company have been conspicuous in the use of this device.

Call Prices.—As elsewhere noted, the corporation makes bonds callable so that it can adapt its financial structure to changing economic conditions and take advantage of lower interest rates. Since call prices are inserted for the benefit of the corporation, they are usually made very low. The normal range would be from 101 to 105. Investment bankers insist that some premium be paid investors for being forced to give up their commitment before maturity; but the premium is seldom sufficient to compensate for loss of the investment when redemption is caused by a general lowering of interest rates. However, exceptions occur in cases of extreme credit stringency. At such times, the corporation may be forced to make the call price very high or make the bonds non-callable. Investors are in a position to drive a good bargain and do not wish to have high interest rate securities taken away from them as soon as the crisis that they have risked is over. Bankers and corporations feeling the public reluctance to take large risks make the securities more attractive by inserting the high call prices. Thus the Great Northern Railway was forced to issue non-callable 7's in the 1920-1921 depression. As was pointed out under refunding, it is better to pay a very high

rate temporarily than to submit to a permanently high premium or a large discount.

Unclaimed Payments.—It is usual in the case of large bond issues for some bonds to remain outstanding after maturity. These bonds may be lost, stolen, or destroyed. They may never be presented. It is desirable to provide in the indenture that, after the lapse of a suitable period, these funds shall be returned to the corporation by the trustee with whom they are deposited.

In the case of bonds called before maturity, there are always delays in presentation. The holder should send in his bonds promptly because the corporation is under no obligation to pay and will not pay interest after the call date. Of course, the corporation remains liable for the principal until the statute of limitations has run, but there its liability ceases.

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CHAPTER 10

SEGREGATED RISK FINANCING

Business Risks.—Business risks are extremely diverse. Governmental policy, international relations, activities in other lines of industry, as well as the activities in the particular line, all affect a single branch of industry. If a business covers several branches of industry, it is subjected to broad risks because each branch has its own separate factors. In some cases, these separate factors tend to move differently and thus offset each other so that the collective results are stabilized. In other cases, they accentuate each other in the same direction, thus prolonging booms and intensifying depressions. Conseqently, nice financial judgment must be exercised in deciding whether these risks should be combined in such a way that a single bond or stock issue will represent a commitment in the risks of several lines of business or of a single line of business. Further, circumstances may require that different parts of the same line of business be separately organized and financed. It is obvious to the ordinary investor that he may lose if floods destroy the properties against which he holds a mortgage. It is not always so obvious to him that a losing branch of the business may undermine and bankrupt a profitable branch of the business if the two branches are combined in the same financial structure. Yet this fact can be amply demonstrated in a number of industries. Let us use the street railways as an example.

Street Railway Credit Decline.—The early history of the street railway and electric power industries shows that, in order to secure the economies resulting from common generating stations, electric railway properties were combined with power and light properties. At that time the electric railways had excellent credit—the best of the local public utilities; but after

the depression of 1907-1909 the credit of electric railway properties declined rapidly. Following the outbreak of the World War, increased operating costs and the competition of other forms of transportation cut into the earnings of the street railways. The effect of these and other forces was to force thousands of miles of street railways with hundreds of millions of capitalization into receivership. Since power properties and street railways were owned by single companies and covered by blanket mortgages, failure of the one branch dragged down the other. The repercussions of these failures were both serious and instructive. Financiers immediately undertook a more careful study of the separate risk and growth factors of the two branches of the public utility industry. Later, they extended their findings of policy to other industries. They developed the policy of financing risks in separate compartments somewhat as ships are built with water-tight compartments.

Street Railway Segregations.—The reorganization of the electric railway system in the Rockford, Illinois, area illustrates a very simple and direct compartment financing technique. The following excerpt from *Electric Traction* gives the gist of the plan:

> After securing all of the properties under the hammer, the Rockford Public Service Company was organized to take over the lines of the former Rockford City Traction Company and to operate the interurban lines. Rather than have a paying property suffer through the inability of another property to pay, separate companies were organized for each of the roads. The lines are now organized as the Rockford, Beloit and Janesville Railway; the Rockford and Freeport Railway; and the Elgin, Belvidere and Rockford Railway, this last being a consolidation of the old Rockford and Belvidere Railway, owned by Bion J. Arnold. These companies are all operated by the Rockford Public Service Company, but must stand or fall according to their own earning possibilities.

Here, as shown by the diagram, any compartment of the system could fail without dragging down the other parts of the system. Power and railway properties have been separated

in the same way as the separate branches of the electric railways were separated here: that is, separate corporations took over the ownership of the separate facilities. Such separation could not displace valid existing liens which covered both sets of properties; but new securities of the railway properties would no longer have claims on the power properties. Hence, power securities could be purchased with confidence that the

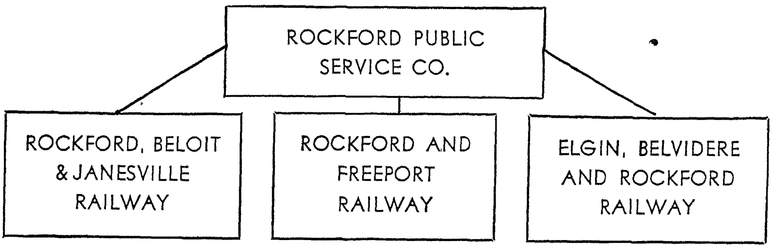

Figure 5. Simple and Direct Compartment Financing Structure of Rockford Public Service Company

street railways would not increase the risks in the securities. Credit risks were separated because each corporation was a separate entity not liable for the debts of any other entity.

Segregation in Other Lines.—Although the electric power and electric railway industries have been used to illustrate the theory of financing segregated risks, this practice is not confined to these industries. Thus, Columbia Gas and Electric Corporation segregated its oil from its public utility business; Standard Oil Company of California, its filling station business from its other business; Erie Railroad, its coal properties; New England Public Service Company, its manufacturing properties; Electric Power and Light Corporation, its natural gas; Cities Service Company, its natural gas and oil properties; and United States Steel, different divisions of the steel business. In fact, most industrials, railroads, and public utilities are organized as holding company systems in which different divisions are separately incorporated and separately financed. Here the causes of separate financing are the same as those previously discussed: namely, (1) the fact that the securities of a corporation having interests in several types of businesses

necessarily represent a variety of risk factors; (2) the fact that the presence of a variety of risk factors may make it difficult to sell those securities because of the uncertainties thereby created; and (3) the fact that new securities may be sold primarily to secure funds for only one of the businesses involved.

Growth and Separation of Risks.—Segregated financing is advantageous chiefly when new financing is undertaken primarily for the benefit of the more prosperous properties. If all lines required equal amounts of new capital, it is doubtful if segregation would reduce the average cost of new money. If financing were undertaken chiefly for the business with the poorer credit, the average cost of new capital would be increased because the bulk of the securities would not have the backing of properties with the stronger credit. The electric power and electric railway industries which have been used for illustration clearly support this theory. The accompanying table shows clearly that nearly all new financing of the electric industries in the 1920's was for the benefit of the power rather than the railway properties.

COMPARISON OF TRACK AND POWER EXTENSIONS 1921-1937
(Source: Moody's *Public Utilities; Electrical World*)

Year	Miles of Urban and Interurban Track	Power Company Expenditures
1921	147.1	$222,408,000
1922	211.4	324,016,000
1923	233.2	602,143,000
1924	312.1	692,440,000
1925	339.8	721,300,000
1926	317.9	841,344,000
1927	192.4	760,353,000
1928	239.0	786,977,000
1929	167.7	866,344,000
1930	153.0	960,889,000
1931	119.1	596,740,000
1932	118.2	285,000,000
1933	174.0	129,300,000
1934	412.5	147,654,000
1935	218.8	192,710,000
1936	119.7	289,710,000
1937	48.5	455,480,000

Faced with the fact that practically all of the new money was needed for the power properties and that the electric railway properties were impairing the credit of the combined enterprises, financiers segregated the power properties and financed them on their own merits. The accompanying table shows how the Lehigh Power Securities Corporation system (now a part of the National Power and Light Company system) financed new capital requirements through the Pennsylvania Power and Light Company, a sub-holding and operating company.

FINANCING BY LEHIGH POWER SECURITIES CORPORATION SYSTEM
(Source: Moody's *Public Utilities*)

Year	Total Bonded Debt		
	Lehigh Power Securities Corporation*	Pennsylvania Power & Light Co.	Lehigh Valley Transit Co.
1922	$16,155,000	$28,280,000	$13,550,000
1923	13,881,000	38,068,000	12,539,000
1924	11,254,000	37,905,000	12,503,000
1925	7,567,000	43,738,000	12,497,000
1926	25,000,000	55,636,000	11,866,000
1927	25,000,000	55,497,000	11,601,000
1928	25,000,000	71,169,000	11,550,000
1929	25,000,000	70,763,000	11,433,000
1930	25,000,000	90,856,000	11,276,000
1931	25,000,000	131,211,000	11,155,000
1932	25,000,000	131,931,900	10,994,000
1933	25,000,000	131,925,900	10,983,000
1934	25,000,000	131,811,400	10,963,000
1935	25,000,000	131,125,000	10,897,000
1936	25,000,000	131,000,000	9,125,250
1937	25,000,000	—	8,308,050

* Lehigh Power Securities Corporation was consolidated with United Securities Company in January, 1926. The change in amount of bonded debt was an incident to recapitalization of the company at that time. These figures exclude assumed bonds of Lancaster County Railway and Light Company of which $746,500 were outstanding in 1931.

Figure 6, on page 150, shows the structure of the compartmentalized risks.

Advantages of Segregation and Combination.—In cases in which both sets of properties require new capital but are

growing at different rates, risk structures can be set up to give both the advantages of separation and of combination. For example, Public Service Corporation of New Jersey separated its electric power properties from its transportation properties

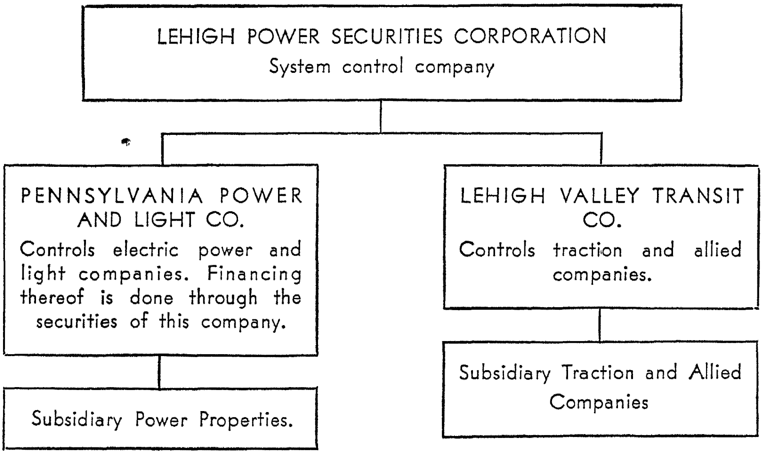

Figure 6. Segregated Financing Structure of Lehigh Power Securities Corporation

and got the advantage of a low rate, separate power risk on its new capital for the power companies. It then financed the transportation company indirectly through Public Service Corporation of New Jersey. Since Public Service Corporation of New Jersey owned the stock equity in both the power properties and the transportation properties, its securities represented a risk in both businesses. But the risk in its securities was better than that of a separate transportation company because the power properties were prosperous. Hence it could sell its securities to the public at a lower yield than could the transportation company. By selling its securities to the public and then turning the new capital over to the transportation subsidiaries in exchange for their securities, Public Service Corporation was able to procure new capital on much better terms than it could otherwise have secured it. It secured the lowest possible rates by separately financing the power properties. It then secured better than pure traction rates by com-

bining the credit of the power equity with the traction equity. The accompanying diagram shows the compartmentalized structure.

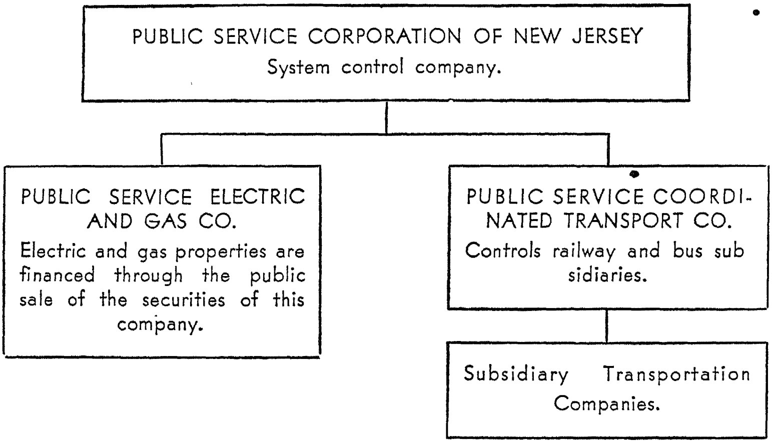

Figure 7. Risk Structure of Public Service Corporation of New Jersey Showing Advantages of Separation and of Combination

The table on page 152 shows how the separate properties were financed. It also shows a diversion of power company funds to traction properties. The latter practice will be discussed later. It constitutes a decided weakness in this type of risk structure.

Cities Service Company adopted a similar policy for financing the different requirements of public utility, oil, and natural gas properties. The diagram, page 153, outlines the general risk structure developed by this giant public utility and oil concern prior to 1938. The different types of businesses were so well segregated by the intercorporate structure that Cities Service Company was able in 1938 completely to dissociate the oil and utility groups with a minimum of difficulty. By relinquishing its control of the public utility group, the parent company avoided registration with the Securities and Exchange Commission under the Public Utilities Act of 1935.

Separate Financing with Assistance from Affiliated Companies.—In the previous section, we pointed out that Public

Service Corporation of New Jersey sold its own securities and then reloaned the proceeds to subsidiaries. This is only one method of helping the subsidiary. The subsidiary could have

PUBLIC SERVICE CORPORATION OF NEW JERSEY FINANCING

(Source: Moody's *Public Utilities*)

(000 Omitted)

Year	Public Service Corporation of New Jersey	Public Service Electric and Gas Company		Public Service Coordinated Transport Company*		
	Bonds and Stock Outstanding	Bonds and Preferred Stock Outstanding†	Public Service Corporation and Affiliated Company Securities Held by Public Service Gas & Electric	Mortgage Bonds Outstanding‡	Advances from Public Service Corporation	Company's Stock Held by Public Service Corporation
1924	$149,628	$61,586	$31,497	$41,753	$2,950	$41,998
1925	173,164	79,086	32,253	41,753	3,580	46,848
1926	207,325	94,086	31,797	41,750	10,325	46,848
1927	261,367	139,024§	53,006	41,575	15,925	46,848
1928	279,918	139,039	52,721	41,568	12,375	46,608
1929	301,529	159,039	50,894	41,563	694	47,858
1930	323,431	159,150	30,564	27,184	375	79,223
1931	331,015	141,150	30,564	26,819	375	79,223
1932	330,019	141,150	30,563	26,426	375	79,223
1933	328,746	141,150	30,563	26,341	375	79,223
1934	328,689	141,150	30,590	26,309	375	79,223
1935	328,689	126,150	30,598	25,792	375	79,223
1936	290,689	125,150	30,651	25,785	375	41,223
1937	290,689	125,150	30,730			

* Predecessor companies prior to 1928.

† Includes only securities issued by Public Service Electric and Gas Co. after its formation.

‡ All stock is owned by Public Service Corp. of New Jersey. Equipment obligations and real estate mortgages have been excluded.

§ Published figures of $180,610,300 have been reduced by the amount of issues called in refunding operations.

financed directly with the aid of a parent company guarantee. Such direct financing is very common among industrials. The forms of guarantee are varied and interesting. Direct guarantees of subsidiary company bonds are very common.

Thus the United States Steel Corporation guaranteed the principal and interest of the Indiana Steel Company Gold 5s when it organized that company to build the Gary plant. Besides direct guarantees, there are several types of indirect guar-

antees. Goodyear Tire and Rubber Company leased the properties of the Goodyear Fabric Corporation at a rental sufficient to meet interest and sinking fund payments on the Fabric Company's bonds, and this lease was pledged with the trustee

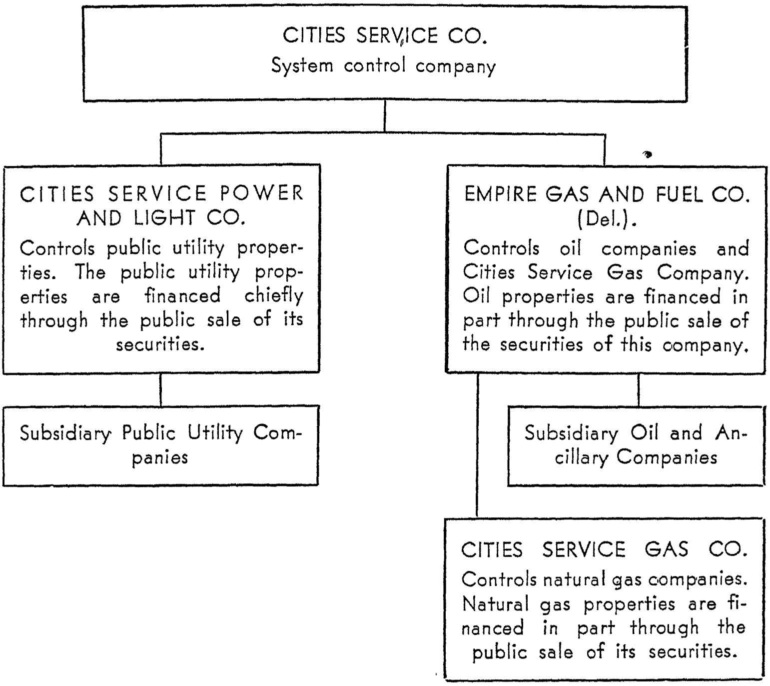

Figure 8. General Risk Structure of Cities Service Company Prior to 1938

of the bond issue. The (Chicago) Tribune Company agreed "to purchase, or cause to be purchased, the entire output of 'Tonawanda Paper Company, Inc.' at such prices as will assure Company of profits adequate to meet interest charges, taxes, etc., and in addition agrees to advance to Company any amounts by which profits of Company shall be insufficient to meet all interest charges, taxes, and the serial maturities" of its bonds. Arcadia Mills and Mills Mill entered into contracts with Fairforest Finishing Company, "guaranteeing to supply cloth equal to at least 85% of their production, so long as notes are outstanding, at a commission" to the finishing plant, "which

it is estimated will give ample net profits to pay principal and interest of" its gold notes. Guarantees of indebtedness are, of course, directly in conflict with attempts to limit the liability of the parent company.

Protection of Parent Company Bondholders.—So far, discussion has centered on the problem of giving the bondholder of an operating company a simple, direct claim against sound assets. We have pointed out that this direct claim may be supplemented by direct and indirect guarantees of an affiliated company. But what assurance does the bondholder of the affiliate have that his security will not deteriorate? If the guarantee to the other company is to be worth anything, the guaranteeing company must assume additional risks. How can these be restricted and limited? Usually the parent company does not want to be restricted in its own financing, but it is willing to limit the right of subsidiaries to create debts. For example, International Agricultural Corporation covenanted in its own bond indenture that "none of the subsidiary companies can create any bonded indebtedness, except for pledge under this mortgage, and they can create no floating indebtedness except such as is incidental to ordinary course of business." This common type of provision forces the holding company to carry practically the entire risks of the subsidiary's business but prevents the placing of prior liens ahead of the parent company's bonds. The policy of holding all bonds of the subsidiary, though not so binding as the indenture requirement mentioned above, tends also to strengthen the holding company's bonds in case of financial disaster to the subsidiary. The policy of holding all bonds of subsidiaries is illustrated by the case of the now defunct People's Light and Power Corporation, which in 1927 held all stocks and bonds of 14 subsidiary corporations, and by that of the late Republic Railway and Light Company whose system, in 1926, held the entire securities of all except nine of its 64 companies.

Evasion of Bond Covenants.—Compartmental financing is also used to diminish the security of bondholders. This is particularly true in cases in which a separate company is set up

to defeat the operation of a "ratable security" provision of debentures or an "after-acquired property clause" in mortgages. For example, the typical debenture covenant usually protects the issue by restricting the right of the company to put a secured issue ahead of it. The following summary of the International Telephone & Telegraph Corporation 20-Year, 5½% Convertible Gold Debentures provision is illustrative.

> The bonds are issued under an indenture in which the Corporation covenants that except in case of purchase money mortgages, and except in case of pledges in the usual course of business for terms not exceeding one year, it will not at any time mortgage or pledge any of its property without thereby expressly securing the principal and interest of the outstanding bonds of this issue equally and ratably with any and all other obligations or indebtedness secured by such mortgage or pledge.

The provisions requiring that debentures be secured equally and ratably become important when the debts of a corporation have become excessive in comparison with the security underlying them. Under such circumstances, the ratable securing of new debts will not be satisfactory to potential creditors because the security for the new debts will be inadequate. Yet, additional funds for continuing operations or an extension of existing short-term loans may be necessary to stave off receivership of the corporation. Faced with these alternatives, corporations have frequently transferred some of their assets to a subsidiary corporation and have mortgaged or pledged them in the subsidiary's name.

This use of compartmental financing is illustrated by the case of Film Production Corporation, a subsidiary of Paramount Publix Corporation. The facts surrounding the formation of this subsidiary were alleged to be as follows:

> To obtain an extension of $10,500,000 unsecured bank loans last March (1932), the company turned over as security to the banks negatives of its current film productions, thereby removing them as assets applicable to the 5½% bonds of the company. This was done through the formation of a new company, the Film Production Corp. and the assignment of the negatives to this company.

Although it had been assumed that courts would disregard the corporate entity of the subsidiary in cases of this type, the New York Supreme Court (an inferior court) upheld this particular transaction in the following language:

> From the facts submitted it does not appear that the covenant in the indenture here involved against creating a mortgage or lien upon assets directly owned by the Paramount Company was breached by the agreement entered into between the Paramount Co., the banks and the Film Production Corp.

Evading After-Acquired Property Clauses.—The typical mortgage covenant which restricts future financing is the after-acquired property clause in the closed mortgage. This clause, repeated in the description of each parcel of property mortgaged, ordinarily reads somewhat as follows: "of whatsoever nature, whether now owned or which may hereafter be acquired," or "which the . . . Company now owns or in which it has any interest, or which it may hereafter acquire."

After-acquired property clauses frequently interfere with additional financing. This interference is found chiefly in two classes of cases: (1) when the clause is contained in a closed mortgage so that no more bonds secured by that lien can be issued to finance new purchases; and (2) when the clause is contained in an open-end mortgage, but when the security protecting the existing issue of bonds is so inadequate that new series of bonds secured by the same mortgage are not attractive to purchasers. In the first class of cases a junior lien is not attractive because of the excessive size of the entire issue of bonds. Under these circumstances, it is either very costly or even impossible for the company to finance additions directly.

However, since the company can mortgage no greater equity than it has, there are several ways to evade the after-acquired property clause. The company may evade it through the lease of property or through the purchase of property under conditional sale agreements—methods now generally used in connection with railroad equipment and formerly used in securing generating equipment for electric power com-

panies. It may acquire property subject to purchase money mortgages. It may pledge old assets which have been released under poorly drawn mortgage clauses providing for the withdrawal of old property when new is substituted under the mortgage—a method available only in most exceptional cases. The company may also consolidate with another company, thereby terminating, in the absence of statutory provisions to the contrary, the operation of the after-acquired property clauses. Finally, it may acquire properties in the name of a separate corporation. Each of these methods has special advantages in some types of transactions. However, the separate corporation method alone is pertinent to the present discussion.

Assuming that dissolution of the corporation by consolidating it with another is not desirable, one finds that the purchase of property through a separate corporation offers distinct advantages because the new property can be financed as an independent enterprise. Further, the identity of the property can be preserved. In connection with the last point, it may be noted that if the investor's protection requires that a separate corporation own the property, he should see that the company's mortgage prohibits consolidation or merger until the bonds are retired. Otherwise, the parent company can merge its subsidiary after the transactions have been financed. Since it eliminates an unnecessary corporate entity, merging is common. In case of merger, however, if the identity of properties is lost, and if the debt of the combined properties is excessive, the bondholders of the subsidiary may suffer.

The case of Public Service Electric Power Company is an excellent illustration of the creation and elimination of a subsidiary formed to acquire property free from the restrictions of the parent company's financial structure. This corporation was first organized because the closed mortgage of Public Service Corporation of New Jersey made separate financing of generating facilities necessary. Later, the difficulties of financing new distributing facilities led to the refinancing of Public Service Corporation of New Jersey. In the course of refinancing, all gas and electric operating companies owned by Public

Service Corporation were amalgamated into the Public Service Electric and Gas Company. Shortly thereafter, Public Service Electric and Gas Company acquired the assets of Public Service Electric Power Company, thereby recombining in a single ownership unit the properties that had been separately incorporated and financed. The bonds of the separate corporations are not ordinarily paid off in cases of amalgamation or merger. The usual practice is for the successor company to assume the debts outstanding at the time of the consolidation.

Weaknesses of Compartmentalized Risk Structures.—The preceding structures have succeeded in part and failed in part in their purposes. From the standpoint of practical working, the structures designed to insulate against insolvent units have fulfilled the intended purpose. However, managements have occasionally sent good money after bad for a considerable period before letting an insolvent subsidiary fail. But, by and large, the structures have stood. Nevertheless, no structure will stand up against deliberate attempts to break it. Any structure can be defeated by milking devices, by manipulations of consolidation processes, and by intercompany lending operations. Law and public regulation are making progress toward elimination of abuses, but as yet a clean bill of health cannot be given financial practices. The following sections illustrate some of the possibilities of loss that security holders must face.

Milking Devices.—Business parlance defines "milking devices" as arrangements whereby the resources of a company are drained away. One can group the more prominent of these practices (so far as of interest here) under the headings: excessive dividend declarations, excessive management fees, unfair intercompany contracts, and incomplete development of corporate units.

Excessive Dividends.—Excessive dividend payments are especially dangerous to the interests of security holders in two ways: (1) they drain away cash at a time when cash can ill be spared; and (2) they tend to cause undermaintenance of

properties so that permanent efficiency of operations is impaired. Both of these dangers are matters of public concern. Hence, during the year 1932, payments of excessive dividends by public utility companies caused definite governmental action. For example, in certain cases, the public service commissions of Alabama and Wisconsin went so far as to prohibit dividends. In issuing one of its orders, the Wisconsin Commission stated that the company appeared "to be postponing expenditures needed to keep service unimpaired and turning over its cash resources to a holding company seemingly for the sole or primary benefit of still another holding company which is in the hands of receivers." [1]

DIVIDEND PAYMENTS OF SUBSIDIARIES IN MIDDLE WEST UTILITIES SYSTEM

(Source: Moody's *Public Utilities,* 1934)

Name of Company	Dividend Payments			
	1933	1932	1931	1930
Public Service Co. of Okla.*	$97,197	$660,940	$1,405,152	$820,152
Southwestern Gas & Elec. Co.*	—	617,950	1,344,950	363,500
Michigan Public Service Co.	—	34,000	136,000	110,625
Missouri Public Service Co.*	—	17,991	65,967	24,985
Mississippi Valley Utilities Investment Co.	Receivership	Receivership	1,956,823	1,008,539
Jersey Central Power & L. Co.*	—	421,508	1,999,671	1,147,953
York Railways Co.†	215,000	120,000	1,100,000	600,000
Eastern Shore Pub. Serv. Co.*	—	45,500	255,150	120,400
Florida Power Corp.*	—	97,500	275,500	175,000
Central Maine Power Co.*	—	350,000	500,000	300,000

* Consolidated statement.

The accompanying table shows the abrupt changes in the dividend policies which the Insull management put into force for various subsidiaries in the Middle West Utilities Company system when, in 1931, the Middle West Utilities Company was plunging into receivership. (Receivers were appointed April 15, 1932.) It is easy to see, in this case, that the welfare of the operating companies was subordinated to that of the holding companies controlling them. That the financial markets recognized this fact can be inferred from the fact

[1] *United States Daily,* July 16, 1932, p. 7.

that the bonds of several of the subsidiaries rallied when the holding company was placed in receivership.

Although the Insull case is in many ways extreme, the policy of dividend bleeding was fairly general among the holding company systems for which information is available. Recent statements of other holding company systems, as contained in the manuals, fail to disclose the amount of dividends paid by 100% controlled subsidiaries. Thus statements of subsidiaries of American Power and Light Company fail to indicate common dividend payments. What the reasons are for not making this information available must be left to conjecture; but it is submitted that, for his own protection, every security holder, from the bondholders down, should insist that the common dividend payments should be made public.

Excessive Management Fees.—Excessive management fees, the second type of milking device, are paid out of the resources of a business as an operating expense. Hence, such fees may not only drain away cash and cause undermaintenance of properties, but they also constitute a charge ahead of interest on debt and dividends on preferred stock. This last fact is of primary significance to preferred stockholders because a holding company management could scarcely be expected to default on bond interest in order to maintain a fee system. The mere default of interest on bonds would throw the subsidiary into receivership and cut off the fees. In the case of preferred stock, however, the dividend is contingent on the action of the directors; hence, receivership does not result from non-payment of dividends, and the corporation is not afforded relief through the receivership channel. To illustrate, the General Gas and Electric Company, the system control company of the former Barstow group, never paid dividends on its common stock and participating preferred stock from the time of its organization in 1912 to its reorganization in 1925; and from 1917 to 1925 it paid no dividends on its cumulative preferred stock. Yet W. S. Barstow & Company, Inc., which controlled the General Gas & Electric Company, received an income from the system. This income was received in the form

of fees for management and construction services which were rendered by the W. S. Barstow Management Association, Inc.

The following quotation indicates clearly to what extremes some managements have carried this method of profiting from their operating companies:[2]

Mr. Bickley presented two computations of the profits on the services to supervised companies for 1927. In one computation he placed the profit for all services at 106% of cost, while in the second he calculated that, excluding services performed under contracts calling for payment only of costs by the supervised companies, the profit on the remaining three services, described as general supervision, construction supervision, and commissions on sales of securities, was at least 241%, and might be shown to have been more if the company's books were opened to inspection by the Commission.

The contracts under which the services are performed, Mr. Bickley testified, are terminable on 60 days' notice by either party, but because of direct control of the supervised companies by Bond & Share they practically are terminable only with the agreement of Bond & Share.

Intercompany Contracts.—Unfair intercompany contracts, the third type of milking device, take a variety of forms in addition to the fee arrangements just discussed. Usually, one company is bled for the benefit of another through a purchase contract; e.g., an electric railway company buys electricity for less than an economic price or an electric generating company pays an excessive price for coal. However, other types of contracts, such as guarantees of indebtedness, are common. The following quotation indicates the general nature of such transactions:[3]

Insull could not have been unaware of the fact that in 1930 the Peabody Coal Company charged the Commonwealth Edison Company $1 to $1.50 more per ton for coal than the market price for the grade which the Edison Company requires for its purposes. The annual report of the company, on file with the Illinois Commerce Commission, shows that the coal used that year was of all grades, but as the Edison plants crush their coal into powdered form, it was unnecessary

[2] *United States Daily*, April 24, 1930, p. 13. The detailed testimony concerning the practices of this and many other companies is available in *Senate Document 92*, 70th Congress, 1st Session.

[3] 72 *New Republic* 201 (October 5, 1932).

to buy the more select grades, and the fact that they did so was for the convenience of the coal company only—so that the latter might underbid other coal companies on contracts to supply state institutions and thus dominate the coal market.

Incomplete Development.—Abuse of control which limits the development or business of subsidiaries, the fourth device, is especially destructive to the interests of holders of subsidiary company securities. In the case of industrial companies, such abuse frequently takes the method of throwing business from one subsidiary to another. This method is especially prevalent where the subsidiaries are of varying efficiencies; for with equal ownership interests, the holding company has most to gain by shifting business to the most economical producer. By so doing, the holding company is able to reap the economies of the lower costs; but the less efficient subsidiary is left without an income for its security holders. Far less defensible is the practice of preventing a marketing company from acquiring producing facilities or a producing company from acquiring marketing facilities. Such an arrangement always makes it possible for the more strategically situated company in the organization to drive a hard bargain. The inherent dangers of the situation are well stated in the following excerpts from a letter by Duncan McKeller to minority stockholders of the Venezuelan Oil Concessions, Ltd.:[4]

Your company is now the largest individual producer of oil in the world. Its present production approximates 50,000,000 barrels per annum, all of which is sold to companies under Shell control. . . .

In our view the policy of the Shell group is leading to the inevitable result that in 1936, when the existing contracts terminate, your company will be left with an immense production, but all the facilities for its disposal will be in the hands of the Shell—a most unenviable position for your company.

The whole history of the oil industry shows that it ought long before the present stage of its development to have owned its own transport and refineries. In our opinion it rests with the Shell group to show why your company was prevented from pursuing this policy.

---

[4] *New York Journal of Commerce,* April 10, 1929, p. 6.

The grave results that sometimes follow such arrangements are indicated by the fact that the Electric Bond and Share Company refused to renew a power contract as one step in negotiating the purchase of the Utah Light & Railways Company.[5] More recently, the Federal Power Commission refused to recognize a foreclosure sale of properties of the Clarion River Power Company as a forced sale and commented as follows:[6]

> In its action in the matter of the Clarion River Power Company's license, the Federal Power Commission has established an important precedent. It announces that where a holding company, by foreclosure sale against the property of an operating utility licensed by the Commission, procures a transfer of such property through another company likewise under the holding company's control, the Federal Power Commission will refuse to recognize the transfer as an involuntary sale.
>
> This ruling, while of general effect on regulation in the interest of the consuming public, incidentally should be of far-reaching importance to investors in the junior securities of operating companies who will find in it a protection to whatever values they may own which might otherwise be impaired or destroyed by transfers of the property. In the present instance, there is involved an issue of $4,453,000 of preferred stock, and the Commission's action results in the restoration of whatever equity that stock may possess. The transfer of the Clarion River Power Co. property by the actual holding company to one of its controlled subsidiaries from another illustrates the tremendous influence of holding companies over operating companies in the power industry and supports the Federal Power Commission's contention set out in its recent report that adequate Federal regulation of licensed operating companies requires regulation of the holding company in the shadow of which many of the Federal licensees live and move and have their being.

Consolidation Processes and Investment Account Manipulations.—Consolidation processes and investment account manipulations are probably the most dangerous threats to intercorporate risk structures. On the one hand, amalgamations, mergers, and purchases of assets can be put through on

[5] Federal Trade Commission: *Control of Power Companies* (1927), p. 111.
[6] 135 *Commercial and Financial Chronicle* 3164 (November 5, 1932).

terms which are grossly unfair to some of the constituent companies and which seriously impair all securities; on the other hand, stock control holdings and other commitments in securities can be so acquired, shifted, and reacquired as effectively to wreck the companies involved.

Unfair Consolidations.—During the 1920's, amalgamations, mergers, and purchases of assets took place with maddening rapidity. These activities provided the vehicle for tremendous inflations of the investment accounts of many industries, but especially of the electric light and power industry. For example, the Federal Trade Commission reported that, when the Florida Power and Light Company was formed, property costing $28,213,209.01 and securities valued at $5,575,791.47, or a combined amount of $33,789,000.48, were set up on the books of the new company at $64,021,008.33, an increase of 89%.[7] In this case all securities of constituent companies had been acquired by the promoting interests; so no problem of diversity of interests arose. But the inflation that took place illustrates clearly the possibilities for injustice. If the public holds preferred or common stocks of any of the companies in an amalgamation or merger, it is possible that their equities will be diluted in the process of consolidation. This dilution will take place by overvaluing one company in comparison with another. That is, if two companies are each worth $100,000 and one of them is put into a consolidation at $200,000 while the other is put into the consolidation at $100,000, each taking like securities in the new company, a part of the equities of the latter company have been shifted to the former. This result follows because the former company now has a two-thirds interest in the combined properties; whereas it held previously only a one-half interest.

Likewise, the properties of one company can be sold to another at an excessive figure. If the mortgage is open and permits the issuance of additional bonds to 75% or 80% of the "cost" of new property, such sales may dilute the security behind even first mortgage bonds.

[7] *Senate Document 92*, 70th Congress, 1st Session, Parts 23 and 24, p. 885.

Even though properties are not consolidated at unfair ratios or purchased at excessive prices, the consolidation process may eliminate certain protections that the security holders have contracted for. Thus the operation of after-acquired property clauses is ordinarily terminated for a merged company in case of merger and for all constituents in case of amalgamation. Restrictions on the issue of preferred stock are automatically changed by exchanging such stock for preferred stock in the new consolidated company. To illustrate, in 1922, Union Electric Light & Power Company (No. 3) of St. Louis was consolidated with Missouri Electric Light & Power Company by transfer of assets and franchises and assumption of liabilities, primarily because it had nearly reached the limits of both bond and preferred stock issues. After the consolidation, the new company, renamed Union Electric Light & Power Company (No. 4), was able to create a new mortgage which had a first lien on all subsequently acquired property. In the same transaction, restricting preferred stock was eliminated by being exchanged for new preferred stock in the process of consolidation.

These weaknesses can develop, of course, in the case of any corporation; but they become especially dangerous in holding company systems because the systems own a great many companies which can be combined and recombined. As is pointed out in a later chapter, in the electric power industry common control usually precedes consolidation by amalgamation, merger, or sale of assets. It may be added that in practically all cases of gross inflation of capital accounts, such common control has been present. This common control and these transactions between sub-systems and subsidiaries render insulated risk structures largely nugatory.

Manipulation of Investments.—Investment account manipulations are another major weakness in risk structures. Wherever investment activities are possible, whether directly by the company or indirectly through an investment affiliate, the opportunity to drain the company of cash and valuable assets exists. The chief occasions which give rise to these

drains may be classified as follows: intercorporate shifts of securities at excessive values, intercorporate shifts of good securities for bad, pledging investment holdings to obtain loans, unloading obligations of holding companies on subsidiaries, reacquisition of securities by stock market operations, and making outside commitments by subsidiary investment companies.

Intercorporate shifts of securities at excessive values were prominent in the late Insull collapse. Thus the consolidated balance sheet of National Electric Power Company, as of December 31, 1931, the year when the company was tottering into bankruptcy, shows an increase in plant and investments in affiliates of more than $85,000,000, the plant figure carrying an excess over book value of more than $13,000,000. This increase was accompanied by an increase in subsidiary bonded debt of $38,000,000, of subsidiary preferred stock of $18,000,000, and of notes payable of $31,000,000. Incidentally, the controlled stocks of subsidiaries were pledged to secure notes payable; so the bondholders of National Electric Power Company salvaged practically nothing from the wreckage. The affairs of several other subsidiaries of Middle West Utilities Company exhibit a like condition. On February 9, 1933, Mr. J. W. Adams, an examiner for the Federal Trade Commission, testified that investments of the Mississippi Valley Utilities Investment Company, carried at a book value of $48,896,863, had a realizable value of about $5,658,000; and on the same day Eugene V. R. Thayer, receiver for the company, filed a report in Federal District Court charging that "senior security holders of the company had been defrauded by the management which was controlled by its parent concern, the Middle West Utilities Company."

Shifts of relatively strong securities for weak ones may be illustrated by the case of General Gas & Electric Corporation. On March 4, 1929, Associated Gas & Electric Company acquired control of General Gas and Electric Corporation. In the same month the directors of General Gas, under the new control, transferred the open account advances and controlling stocks of the strong subsidiaries (Metropolitan Edison Com-

pany, Northern Pennsylvania Power Company, New Jersey Power and Light Company, and Binghamton Light, Heat & Power Company) to the Associated System in exchange for Associated Electric 4½s and Associated Gas & Electric 5s. Thus, holding company bonds were given the new subsidiary in place of direct equities in basic operating properties. The transaction did not rest there, however, for

> an arrangement was made in April, 1929 under which the bonds received for the common stocks of the four companies mentioned above, aggregating $64,890,000 principal amount, were exchanged for 371,083 shares of $5 preferred stock and 400,000 shares of class A stock of Associated Gas & Electric Co., 5,878 shares of 7% preferred stock of Broad River Power Co., and 5,509 shares of 7% preferred stock of Florida Public Service Co.[8]

The result of this series of transactions was that General Gas & Electric Corporation finally held the unstable junior securities of a complicated top holding company instead of the much more stable common stocks of well-known operating properties. The second transaction of itself was disastrous as can readily be seen from a comparison of security prices. On February 24, the Associated Gas & Electric 5s of 1968, which were taken at 91⅛ in the first transaction, had a market value of 18¼; whereas Associated Gas & Electric $5 preferred, which was taken at 90 in the second transaction had a market value of 6. At the same time, Associated Electric 4½s of 1953, which were taken at 87⅛ in the first transaction, had a market value of 34½; whereas Associated Gas & Electric Class A, which was taken at 57 in the second transaction, had a market value of 1½.[9]

Pledged Securities.—This chapter has already alluded to the fact that investment portfolios are frequently pledged to secure current loans. Such pledging can wreck any investment company and, hence, is of special significance here only to the extent that intercorporate risk structures introduce special

[8] 135 *Commercial and Financial Chronicle* 3353 (November 12, 1932).
[9] *Ibid.*, February 25, 1933. The management has claimed the highest motives in these transactions and we can grant their contentions; but it is well to note that the result is the same regardless of motives.

problems. From this point of view one notes that one sub-system frequently borrows while making advances to other parts of the major system. Thus, the 1931 consolidated balance sheet of National Public Service Corporation shows a $6,590,415 increase for the year in advances to affiliated companies outside its sub-system. At the same time notes payable increased $18,388,916, and most of these notes were secured by the pledging of subsidiary company stocks and bonds. In the receivership that followed shortly thereafter, the debenture holders of National Public Service Corporation found the Corporation's resources largely exhausted, and the debentures fell to a low of 5¼ in June, 1932. Thus it is evident that, like intercorporate shiftings of securities, secured borrowings for the benefit of affiliates may prove a substantial source of weakness to risk structures. Their primary weakness lies in the fact that the advances may prove uncollectible, thus causing a loss of assets or inability to meet the loans when they fall due.

Unloading Obligations.—The unloading of a holding company obligation on a subsidiary may be illustrated by the following summary of allegations in a suit for an accounting, filed against Balaban & Katz Corporation.[10]

It is alleged in the bill that when Paramount Publix Corp., in July 1929, purchased 70% of the stock of Great States Theatres, Inc., in exchange for 30,000 shares of Paramount Publix Corp. common stock it agreed to repurchase the 30,000 shares at $85 a share between Jan. 1 and 10 of this year, if the owners wished to resell. It is further alleged that in December of last year the owners notified Paramount Publix Corp. that they desired to resell their stock at the price of $85 a share. The control of Great States Theaters, Inc., had been transferred to a new corporation, Publix Great States Theaters, Inc.

The bill charged that "officers and directors of Paramount Publix Corp. acting in collusion and conspiracy with officers and directors of Balaban & Katz Corp. devised a plan to unlawfully saddle the obligation to rebuy the 30,000 shares of Paramount Publix on Balaban & Katz Corp."

Balaban & Katz, the bill alleges, paid to Paramount Publix $516,000 in cash and gave its notes for $2,034,000. The cash and

[10] 135 *Commercial and Financial Chronicle* 130, July 2, 1932.

notes, the bill says, were turned over by Paramount Publix to the owners of the 30,000 shares of its stock which it then received.

The bill declares the consideration for Balaban & Katz Corp.'s payment of the money and notes to Paramount Publix was the transfer to it by Paramount Publix of 7,000 shares of common stock of Publix Great States Theaters, Inc., and Paramount Publix's rights to $337,586 dividends from Publix Great States Theaters, Inc., but it is alleged the 7,000 shares of stock were worthless. It is further alleged that "the sole purpose of the transaction was to relieve Paramount Publix of its obligation to rebuy its stock."

This type of transaction has been common and disastrous. Trafficking in a company's own stock has been one of the most serious defects in corporate policy. It is not a defect which is peculiar to holding corporation systems; but nevertheless, a federated intercorporate structure facilitates concealment of management stock jobbing activities. Thus the new management of the Commonwealth Edison Company (in discussing a $3,752,055 surplus adjustment covering losses on stock reacquired in 1932) stated that "the directors had no realization of the extent to which the company was committed by the purchase of its own stock until the early part of 1932." In this case the actual purchases had been made through Commonwealth Subsidiary Corporation, an investment subsidiary. It may be asked: If the directors do not see the situation, how much worse off is the investor?

This same company can also illustrate the possibility of draining off assets through the investments of a subsidiary investment company. Prior to 1932 the Commonwealth Subsidiary Corporation made extensive investments in corporations manufacturing trucks, conveyances, appliances, etc., and in the Chicago elevated and suburban electric railway lines. In 1932 the new management of Commonwealth Edison Company appropriated $30,000,000 from surplus to absorb the losses resulting from these commitments and announced that "the board of directors has adopted the definite policy of gradually eliminating investments of this class, and of restricting the operations of the company, so far as possible, to the generation and distribution of electrical energy."

The preceding discussion indicates that consolidation processes and investment transactions offer almost unlimited opportunities to defeat risk structures. So serious had the situation become by 1932 that at least one of the major holding corporation interests made a special point of informing the public concerning cross-ownerships and loans within its system. Thus the 1932 annual report of Electric Bond and Share Company states:

> Company has no funded debt, bank debt, endorsements or guarantees. It has no securities outstanding except preferred and common stocks.
>
> None of the holding companies (below) or their subsidiaries owns any stock of Electric Bond & Share Co. Each holding company with its subsidiaries constitutes a separate corporate group. There are no cross-ownerships of securities or loans between these groups. No company in any group owns any securities of any other company in the group except securities of its subsidiary companies, or has any loans from any other company in the group except from its parent company. No company in these groups has any bank debt, except United Gas Corp., which has $21,250,000 bank loans due July 20, 1933.

How dangerous the loopholes must have been if corporations themselves found it necessary to advertise against them!

Intercorporate Loans.—The three chief types of intercompany loans consist of subsidiary company deposits of cash with holding companies, subsidiary company guarantees of holding company notes payable, and direct loans and advances from subsidiary companies to holding and affiliated companies. The first type, deposit borrowing, is illustrated by the practice of the Associated Gas & Electric Company System in 1932. In this system the operating companies deposited all cash receipts "in local banks to the credit of Associated Gas & Electric" Company and, in lieu of recording cash on their books, set up an account receivable. The second type of transaction, subsidiary guarantees of holding company notes, is illustrated by the case of American Commonwealths Power Corporation. In 1931 the Birmingham Gas Company, an indirect subsidiary of American Commonwealths Power Corporation, became con-

tingently liable on the latter company's notes to the amount of $400,000. In 1932, with the American company in receivership, the Birmingham company had to take up the notes. The third type, direct loans and advances, is the most important and most extensive type of lending device. Perhaps the most startling case of such advances that the author has noticed is that of the Electric Management and Engineering Corporation. When this company was petitioned into bankruptcy in July, 1932, assets were listed as $14,000,000, of which $13,-004,500 were due on notes of its bankrupt parent corporation, the National Electric Power Company. The following table

INTERCOMPANY ADVANCES: MIDDLE WEST UTILITIES COMPANY SYSTEM, 1930-1931

(Source: Moody's *Public Utilities*, 1932)

Name of Subsidiary	Advances	
	1931	1930
Central Power & Light Co.	$1,278,083	—
Southwest. Gas & Elec. Co.	1,200,000	—
Tide Water Power Co.	619,189	—
Public Service Co. of N. H.*	600,000	—
Lexington Utilities Co.	2,282,735	$2,148,993
Jersey Central P. & L. Co.	608,991	146,336
Keystone Public Service Co.*	889,269	361,790
Penn Central L. & P. Co.*	2,531,471	1,899,076
Virginia Public Service Co.*	2,059,905	3,314,483
National Elec. P. Co.*	17,192,627†	12,525,997†
National Public Service Corp.*	10,603,486	4,013,071
Seaboard Public Service Co.*	12,952,229	1,115,774

* Consolidated balance sheet.

† Composite item, including some extra sub-system investments.

shows the changes which took place during 1931 in the advances of companies in the Middle West Utilities Company system, which was at that time tottering on the verge of receivership.

Conclusions.—In summary, separate financing of varied risks is sound if the risk structures can be securely insulated. However, up to the present time, lax laws and too liberal corporate charters and security covenants, coupled with insuffi-

cient publicity, have permitted incompetent and ruthless managements effectively to nullify the principal protections of risk-segregating devices. The Securities Act of 1933 will prevent some of these abuses in cases in which future financing is necessary. The Securities Exchange Act of 1934 will reach some of the publicity problems but will not cure investor ignorance. The Public Utilities Act of 1935 seeks to eliminate most of the abuses among interstate domestic utilities but will reach only this limited group. Although the author has drawn heavily on public utility illustrations, it must be remembered that the hazards apply to all fields.

The Securities Act of 1933 reaches manipulations chiefly through the disclosure requirements found in Schedule A. This schedule is set forth in the chapter on Investment Banking. Sections 10, 12, and 13 of the Public Utilities Act of 1935 are the principal parts of the act bearing on the problems of this chapter. These sections give the Securities and Exchange Commission broad powers for the regulation of intercompany loans, dividends, security transactions, purchase and sale of utility assets, proxies, campaign contributions, management contracts, and other transactions. Campaign contributions and "up-stream loans" are prohibited.

The reader should take note again that this act applies only to interstate public utility holding corporations. Foreign enterprises, industrials, and other types of companies do not come within its scope.

References

Senate Document No. 213, 69th Congress, 2d Session, *Control of Power Companies* (1927).

Senate Document No. 46, 70th Congress, 1st Session, *Supply of Electrical Equipment and Competitive Conditions* (1928).

Senate Document No. 92, 70th Congress, 1st Session, *Utility Corporations* (1928).

CHAPTER 11

WORKING CAPITAL

Nature and Functions.—Every business must have labor and materials with which to operate its plants. It may have to extend credit to its customers pending their payment for purchases. It must have a cash balance in the bank for comfortable operation. These assets are known as short-term or current assets. In the aggregate they are the working capital of the concern. It is by the help of these that the plants are able to function. Raw materials are purchased, and wages and salaries are paid for the services that go to ripen them into finished goods. As these goods ripen, they are sold to customers on credit. The accounts and notes receivable are collected in cash. Cash is used to purchase more materials and labor. The cycle repeats itself. Because of this cycle the classical economists called the current assets of a business circulating capital, but modern terminology designates them as working capital.

It is important for the student to appreciate that every dollar locked up in raw materials, in goods in process, in finished goods inventories, in accounts and notes receivable, in prepaid items, and in cash must have come from somewhere. The business must have obtained those resources by selling securities, by borrowing on short term, or by reinvesting earnings. If inventories are sold on credit, the business must obtain more money to replace the inventories provided the business is to continue to run. It cannot both lend its resources and have them to use. This means that the original financial plan must contemplate adequate provision for working capital needs, and these needs include not only all current assets that will ultimately appear on the balance sheet but also the funds that will be lost in paying expenses until the business has reached a profitable level.

Regular and Variable Working Capital.—Most businesses are seasonal. That is, their activities increase and decrease in different parts of the year. Whether the fluctuations are the result of folk customs and holidays, as for example the Christmas shopping which makes department store sales 173% of normal in December, or whether they are the result of weather changes, as in the soft drink business, the effects are the same.

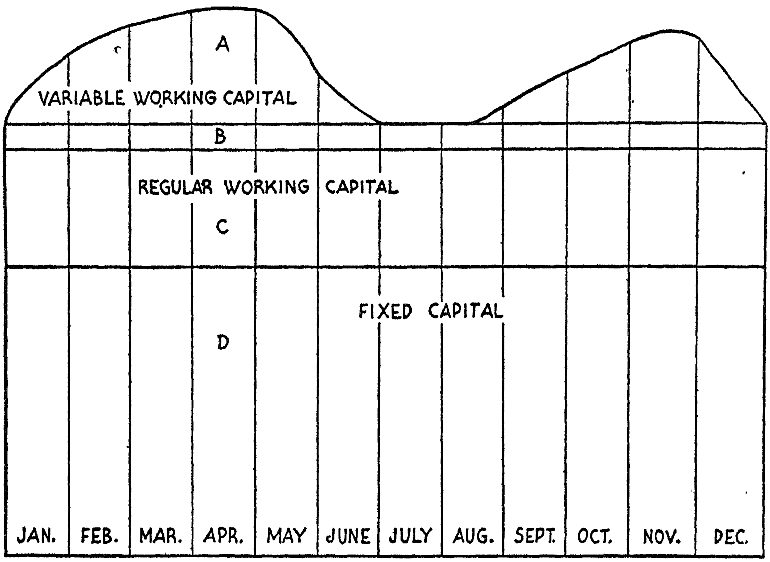

Figure 9. Fluctuation of Working Capital

A = Assets supplied by short-term borrowing (variable working capital).
B = Assets supplied by normal discount period.
C and *D* evidenced by long-term securities.

Inventories and receivables pile up larger in one part of the year than in another. Yet most businesses are operating at some level throughout the year. They will always have some current assets on hand. That amount of current assets they have on hand day in and day out throughout the year is known as regular working capital. The seasonal part of such assets is known as variable working capital. The distinction between regular and variable working capital is important in arranging the financing of the enterprise. It is undesirable to bring regu-

lar working capital into the business on a short-term basis because a creditor can seriously handicap the business by refusing to continue lending. Since the business needs the funds permanently, its only recourse is to curtail operations unless another lender can be found. However, in the case of seasonal needs the funds will not be required after the close of the season. Consequently, there is no need to renew the loan at the time, and no embarrassment can follow immediately on its maturity. The inventories or receivables carried with the temporary funds provide the means of repayment. The loan is said to be self-liquidating and therefore meets good banking standards. Whether or not the corporation will use short-term credit for seasonal needs depends to a large extent on the relationship of short-term to long-term interest rates. If the company can secure funds more cheaply at long term, it will obviously do so, first, because it is cheaper and, second, because its financial position will be that much stronger. The accompanying diagram shows the fluctuation of working capital.

Sources of Working Capital.—Working capital may be obtained on a long-term basis by the sale of bonds and/or stock, or by retaining earnings in the business. The student is already familiar with the nature of bonds and stock. Retention of earnings is discussed in the chapters on expansion and on dividend policies.

Of particular importance at this point are the short-term sources of working capital. These sources include the use of trade credit, bank loans, bankers' acceptances, trade acceptances, and technical commercial paper. As indicated, such sources are properly used only for variable working capital requirements.

Trade Credit.—When a business orders goods without paying for them at the time of delivery, it is using the resources of the seller. This borrowing of goods from the seller is known as using trade credit. The period during which the purchaser can go without paying and the terms under which he must pay are known as trade credit terms. Thus in the men's clothing industry it is customary for the manufacturer to bill

stores either on a 2/10, net 30 or a 2/10, net 60 basis. These mean that the purchaser can pay at the end of 10 days and deduct a 2% discount from the purchase price at which the goods are billed. If he fails to pay within 10 days, he cannot thereafter deduct the 2% discount and must pay the bill by the end of 30 days or by the end of 60 days as indicated by the net terms. The 2% that the merchant cannot deduct if he runs over the 10-day period is really an interest payment for the use of the seller's funds for the remaining 20 or 50 days, as the case may be. If one analyzes the trade terms in this way, it is easy to see that a merchant cannot afford to use trade credit beyond the free 10-day period. Two per cent for the remaining 20 days is at the annual rate of 36% (360 days divided by 20 days gives 18 periods per year—at 2% per period the rate is 36%). Likewise, 2% for the remaining 50 days is at the annual rate of 14⁴⁄₁₀%. A sound business can borrow from other sources at a less rate of interest. Consequently, it should never have more than 10 days' purchases outstanding when trade terms are this restrictive. Occasionally, discounts will not be taken because the vouchers were not put through the accounting procedure in time. In these cases, the discount lost should be chalked up against inefficiency in the organization and not thrown into the cost of borrowed capital account. However, if the business is poorly financed so that it cannot take discounts, the discounts not taken should be shown as a cost of using the capital of others so that the management can see exactly how costly their financial set-up is.

Bank Loans.—Banks provide billions of dollars of resources to corporations in return for the corporations' promises to pay. A corporation usually approaches the bank with a request that the bank set up a line of credit for its use. The bank requires the corporation to supply financial statements and answer questions concerning its business. The bank may send experts to inspect the properties. After the necessary credit information has been assembled, the discount committee of the board of directors of the bank establishes the line. The line of credit is merely a statement of the maximum amount of the notes the

business will be permitted to owe the bank at any one time. After the line is established, the corporation can obtain funds from time to time by sending a properly signed note to the loan teller of the bank. Since the borrowing has already been authorized, the teller will enter the note and credit the deposit account of the corporation with the proceeds of the note. The actual borrowings of the corporation may fluctuate anywhere within the limits of the line of credit.

The cost of bank borrowing is usually greater than the face rate of interest paid would indicate. Cost is increased because banks ordinarily require that their customers leave a deposit balance in the bank equivalent to a certain percentage of borrowings or of the loan line, depending upon the activity of the line or the practice of the particular bank. This percentage runs from 10 to 20. Twenty per cent is very common. Since the corporation cannot draw out this balance, it is actually forced to borrow more money than it needs. The interest on the excess borrowing constitutes an increased cost. The actual cost may rise above the legally permissible rate; but this is not a violation of the usury statute because the bank does not absolutely require that the balance be kept. Checks will be honored to the last penny. Nevertheless, if the corporation seeks to borrow again, it may find the bank unwilling to lend. Consequently, the corporation maintains the balance. The bank feels justified in requiring the corporation to maintain an emergency reserve on deposit with it and feels that the balance serves other functions than merely to raise the rate of interest.

Banker's Acceptances.—The bank may aid the corporation without actually putting out the bank's money. This it can do by guaranteeing that a claim will be paid. The banker's acceptance is designed to accomplish this end. It is used chiefly in foreign trade transactions. Assume that a corporation wishes to import goods, say from Rumania. The Rumanian exporter is unwilling to send the goods to the corporation on the corporation's own credit. Therefore, the corporation applies to its bank for a letter of credit. This letter informs the Rumanian exporter that the bank will accept a bill of exchange drawn on

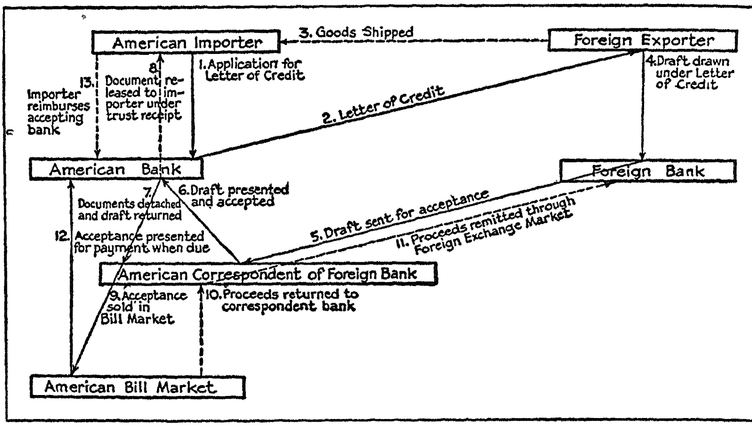

Figure 10. Diagram of an Import Transaction

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it if the conditions stated in the letter are fulfilled. These conditions are usually that the amount of the bill of exchange shall not exceed a certain specified sum, that it shall become due after a specified period of time, that the bill shall be accompanied by consular invoices, bills of lading, and other documents necessary to indicate compliance with the letter and to

No. 1000 Sofia, Bulgaria, May 5, 1937

Ninety days after sight pay to the order of Ourselves Fifty thousand dollars. $50,000. Drawn under First National Bank letter of Credit No. 3,367,352, dated April 1, 1937.

Value received and charge the same to the accounts of

To First National Bank A. Y. Sherba & Co.
New York, New York

Figure 11. Banker's Acceptance

give title to the goods shipped. The bank sends this letter to the Rumanian exporter who ships the goods. The exporter draws the bill and either presents it through regular banking channels for acceptance or sells it to a bank in Rumania which will do so for its own account. The corporation's bank will accept the bill when presented. It cannot refuse to do so because it can be sued on the letter of credit if it fails to do so. However, it will not be required to put up any money because it will have made a separate agreement with the corporation to deposit funds with the bank by the time the accepted bill (acceptance) becomes due. The bank has merely substituted its credit temporarily for that of the corporation. It charges a small fee for this service, usually ⅛ to ½ of 1%.

Trade Acceptances.—Trade acceptances are similar to bankers' acceptances. The only distinction is the acceptor. A banker's acceptance is a bill of exchange accepted by a banker. A trade acceptance is a bill of exchange accepted by a trade firm. Thus in the previous example, had the Rumanian exporter drawn the bill directly on the corporation and the corporation accepted it, it would have been a trade acceptance.

Commercial Paper.—Popular usage treats promissory notes, bankers' acceptances, and trade acceptances arising in the course of commercial transactions as commercial paper; but technical usage restricts the term commercial paper to issues of notes which are sold in the open market like bonds. These notes are ordinarily of large denomination. The smallest is usually for $2,500 and they range up to $50,000 denomination for a single note. $5,000 and $10,000 denominations are common. An issue consists of a large number of these notes and is sold to specialized dealers or brokers known as commercial paper houses or commercial paper brokers. They resell the notes, primarily to banks. To use this method, the corporation must have very strong and well-known credit. As in the case of bank borrowing, the cost of using this channel is greater than the face rate would indicate. Not only do the commercial paper houses charge a commission, but they usually insist that the corporation have bank lines open so that the

corporation can borrow from banks to pay off the open market notes if circumstances require this procedure. Complying with bank line requirements means the keeping of idle deposits and hence higher costs. Further, the commercial paper house usually insists that the corporation not borrow from the banks while the paper is outstanding. It does not want the corporation to pile up too much short-term debt.

Net Working Capital.—Net working capital is the excess of current assets over current liabilities. It represents the amount of the current assets brought into the business from long-term sources. As an abstract figure, net working capital merely indicates the amount of shrinkage that can take place before current liabilities are not fully covered. Since bondholders also have claims against current assets in case of failure and since bond covenants are usually drawn to permit the bondholders to realize on current assets, the concept of net working capital is of slight importance. Nevertheless, many of those silly word battles in which professors delight to engage have been fought over whether the term *working capital* meant current assets or excess of current assets over current liabilities. The argument apparently arose from confusing an economic concept of capital with an accounting concept of proprietorship (an excess). Fortunately, abuse of the economic terminology is decreasing. The terms *working capital* and *net working capital* as here used are now generally accepted.

The Amount of Working Capital.—The amount of working capital required will depend upon the nature of the business. If trade terms require the business to carry its customers for 10 days, it will normally have 10 days' sales outstanding; and 10 days' sales at one time of year will differ from 10 days' sales at another. It will also have its proportion of slow-pay sales outstanding. If it must bring raw materials from the far ends of the earth, it will have to have raw materials inventories of sufficient size to guarantee the steady flow of work through the plant without interruption. If its processes require 10 days for completion, it will always have a

10 days' stock of goods in process. Its finished goods inventory must be of sufficient size to permit the filling of customers' orders as they arrive. Its cash must be sufficient to make payment as bills become due. Above these minima the corporation can make its working capital position as comfortable as it desires. It can have sufficient cash to snap up bargains. It can buy in large inventories to take advantage of rising prices. But the amount of working capital necessary at any given time will vary with the circumstances of the company.

Inventory Turnover.—Keeping inventories at a minimum speeds up their rate of turnover, since turnover is figured by dividing the amount of the inventory into the cost of goods sold. Turnover figures are, therefore, a good guide by which to determine whether inventories are too large. Largeness may come from carrying excessive quantities of necessary goods or from retention in the inventory of a large stock of unsalable goods which turn over not at all. Studies of this ratio are emphasized in nearly every book, but much confusion seems to exist in illustrations in current literature. Dozens of illustrations indicate the profits of quick turnover thus: A unit of goods costs $5 and is sold for $7, giving a profit of $2. If the merchant can speed up his turnover from one to two times, his $5 inventory will have turned over twice, and he will have made $4 profit. He has doubled his profit. However, the illustration is defective. The increase in profit has come from increased sales volume, not from increased rate of turnover of inventory. The ordinary business finds its sales volume limited. It can increase profits via the inventory route only by carefully managing inventory. Its savings here are directly limited. They lie chiefly in savings in interest on funds that would be locked up in excessive inventory, in rent on storage facilities for the excess, in insurance on the excess, in some handling expense, in some savings from shop wear, and in some other minor respects. These savings are worth while, but they are far from the spectacular sources of profit that many an example suggests.

Cash.—Cash is the barometer fund that first reflects changes in the affairs of the concern. When a concern is starting, the fund is large until the operating assets have been purchased. After the concern is under way, it reflects the change in seasonal and cyclical working capital conditions. At peak seasons inventories and receivables are built up; cash is lowered. In off seasons inventories are low; cash is high. When business crashes, inventories are liquidated as fast as possible; receivables are collected. On the down swing of the cycle, cash builds up by conversion of other assets into cash. As the cycle progresses, this cash is either retained in idle accounts or is used to meet obligations and losses. When recovery sets in, cash is drawn down to replace inventories; and as receivables increase, cash is not replenished as fast as inventories are purchased. If much cash has been lost, the business is soon forced to seek new funds to finance the return to normal operations. In the early stages of a business recession the strong cash position of corporations frequently leads to clamor for corporations to declare large dividends and thereby bring back prosperity. Little do most of the agitators realize that these cash resources will have to be used to sustain the corporation through the depression and then be used in restoring normal operations. Good financial management seeks to increase cash resources at such a time. Thus, the Morgan-advised American Telephone and Telegraph Company sold long-term securities in the spring of 1930. With the cash thus obtained it weathered the long depression without trouble. Other strong companies followed the same policy.

Cash position is particularly important in depression periods. During the period 1929 to 1936 it was customary to take the cash resources of a company and calculate the number of years it could hold out at its probable rate of losses. In this connection, the bulk of the allowance for depreciation and all of the depletion allowance in its income statements was assumed to help the cash position by converting fixed assets into cash. Not all depreciation allowances can be considered a source of cash help because ordinarily some machinery or facilities will have to be replaced in order to permit continuous

CASH BUDGET
1938-1939

	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total
Cash balance at beginning of month													
Cash receipts Accounts receivable Notes receivable Sales Investment income Miscellaneous Total													
Cash disbursements Notes payable Accounts payable Factory payroll Factory expense Departmental exp. New equipment Taxes Miscellaneous Total													
Excess of disbursements Cash balance end of month													
Loans required													

Figure 12. Skeleton Form of Cash Budget

operations. Thus, from 1931 to 1936, Bethlehem Steel Corporation required less than 60% of its credits to depreciation to cover renewals, repairs, and maintenance of the period. The accompanying statement shows the facts.

DEPRECIATION, RENEWAL, AND MAINTENANCE ACCOUNT

BETHLEHEM STEEL CORPORATION

(Source: Moody's *Industrials,* 1937, p. 816)

Year	Credits from Expense	Charges for Renewals, Repairs and Maintenance	Excess of Credits	Percentage of Cash Drain to Total Credits
1936	$61,696,766	$40,360,281	$21,336,485	66
1935	41,739,086	24,666,017	17,073,069	59
1934	37,818,531	22,491,187	15,327,344	60
1933	30,845,008	15,405,642	15,439,366	50
1932	24,536,670	10,190,866	14,345,804	42
1931	37,165,761	20,623,620	16,542,141	56

Cash Budget.—A business normally controls its cash position through a specialized budget. This is merely a statement showing a record of past receipts and disbursements together with estimated receipts and disbursements and current balances. The statement will show by comparison of estimated disbursements with estimated receipts and bank balances whether or not new financing will be required during the period. A skeleton form of cash budget is shown herein.

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CHAPTER 12

INVESTMENT BANKING

Funds Markets.—The corporation taps two types of markets for its resources. These are the money market, or short-term loan funds market, and the capital market, or long-term funds market. The money market deals in promissory notes, commercial paper, bankers' acceptances, and trade acceptances. The capital market deals in stocks and bonds. Money market instruments are quoted in terms of interest yield to maturity; capital market instruments, in percentages of par value of bonds or dollars per share of stock. However, both sets of instruments are priced in terms of interest rates. The rates in the two markets vary because of the differences in maturity of the claims. The short-term interest rates fluctuate much more widely than the long-term rates because they feel more immediately the effects of changing amounts of loanable funds. Short-term rates are much below long-term rates during easy money periods and above long-term rates during periods of stringency. People are not willing to put money out at long term when rates are excessively low; corporations are not willing to borrow for long terms when rates are excessively high, nor do corporations usually need for long terms the funds obtained during high rate periods. Despite the fact that each market has its separate rates, both tend to be influenced by each other. If long-term rates are more attractive than short-term rates, funds tend to flow to the long-term market and equalize the difference. If short-term rates are more attractive than long-term rates, long-term funds tend to flow into the short-term market. Actually, although we have discussed the two markets as entities, they have great variations within themselves. The money market is really an aggregate of separate markets for the different classes of short-term funds, and the capital market is an aggregate of

separate markets for different classes of capital securities. Each class reaches investors with different requirements and different temperaments. Methods of getting resources from the money market are discussed in the chapter on working capital. The present chapter deals with the mechanisms of the capital market.

Organization of Capital Market.—The capital market is highly organized. On the purchasing side it embraces individuals and institutional investors, such as savings banks, commercial banks, insurance companies, mortgage banks, trust companies, and investment trusts; on the selling side, the corporations and governments which issue securities; and between these the securities exchanges, brokerage establishments, and investment banking houses which originate the issues and then provide a market where they can be shifted from one investor to another. It is no part of the purpose of the present text to explain the functioning of these investment mechanisms, but it is well to point out that, because of the size of the funds that they employ, the institutional investors play a leading rôle in determining interest rates and investment standards. This chapter is confined to a description of the operations of the investment banker in originating, selling, and maintaining a market for the securities of a corporation which seeks funds from the capital market.

Contacting the Investment Banker.—When a corporation wishes to sell long-term securities, it contacts an investment banking firm. It may seek the banker or the banker may seek it. Contrary to the impression given by some literature, the investment banking firms are frequently aggressive in seeking new issues to underwrite. They keep close watch on the capital needs of corporations and seek the new business when they find an enterprise in need of funds. After a banker has once underwritten an issue for a corporation, he tends to become the permanent underwriter of its new issues. This fixed relationship between bankers and corporations has been broken with respect to railroad equipment obligations, and pressure is being applied to cut more corporations loose from permanent

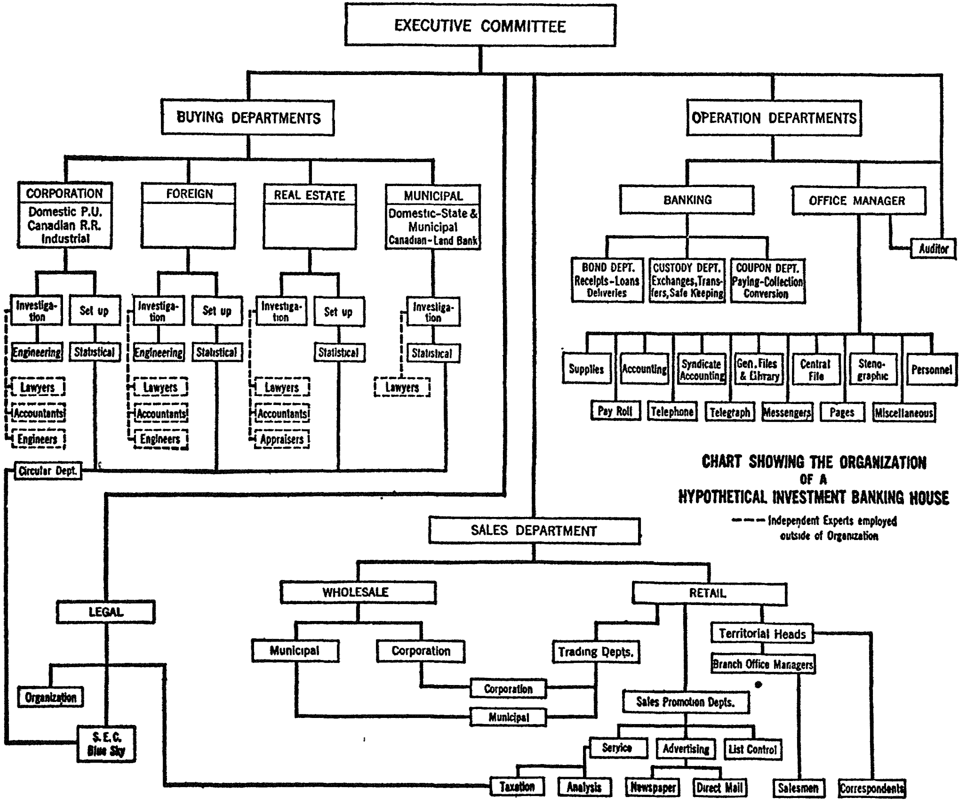

Figure 13. Organization Chart—Investment Banking House
(Source: Willis & Bogan, *Investment Banking*. Reproduced by permission of Harper & Bros., Publishers)

ties; but to date the tie-ups between corporations and investment houses have not been materially changed.

Purchasing the Issue.—When the investment house first receives the new financing proposal, it makes a rapid survey of available financial statistics of the corporation. If the situation proves inviting, a memorandum contract is drawn up giving the investment house an option on the new issue for a sufficient period of time to permit it to make a thorough investigation of the proposal. Thus protected in making an expensive survey, the buying department of the investment house details its experts to make comprehensive accounting, marketing, engineering, and legal surveys. Some of these matters will be passed on by members of its own staff. Other matters will be investigated for the investment house by independent firms of consulting engineers, lawyers, or accountants. If the investigation proves satisfactory, a detailed formal purchase agreement will be negotiated. The banker will see that the maturity of the issue conforms to the customary maturities of issues in the industry, that the yield approximates the yield of similar securities in the market, and that the detailed provisions and special features conform to the current tastes of investors. Detailed provisions will cover compliance with securities laws, listing on exchanges, and reports to bankers. The engraving will be arranged for by the banker. To all intents and purposes the trustee will be selected by him. The banker will agree to pay a price below the offering price to the public. This price will be sufficiently low to permit absorption of expenses of sale and to give a profit. In the case of bonds, the spread between banker's purchase price and public offering price may run from one point on high grade, readily salable bonds to ten or more points on a highly speculative issue. The banker will take the issue at the price agreed upon and bear all loss if he cannot resell at the assumed price. Further, he will pay the corporation cash at the date specified in the contract even though he has not sold the issue.

Purchase Group.—Since the purchasing house contracts to pay a fixed price for the securities, it assumes all the risks of

the market. If security prices fall before the issue is sold, the banker must absorb the loss as any other merchant absorbs the loss when he closes out merchandise at less than cost. The banker is willing to assume the entire risk of a small issue of securities. In fact, he may have sounded out customers and have arranged its sale before the purchase terms were arranged. But in the case of large issues the risk is too great for a single firm to shoulder. Consequently, the originating house forms a syndicate of investment houses to make the purchase. The originating house becomes manager of the syndicate, but the risks are spread. The liability of the syndicate members may be limited (divided) or unlimited (undivided). In the limited syndicate (which is more generally used) each member is allotted a participation of, say $1,000,000. Its liability ceases when it has taken up that amount of the issue. In the unlimited syndicate the member is forced to take up unsold securities at the end of the syndicate regardless of the amount it has sold. It must take these unsold securities in proportion to its participation in the syndicate. Usually, all members of the purchase group purchase the securities on the same terms as those under which the originating house purchases them from the corporation.

Selling Group.—The purchase syndicate will offer selling houses an opportunity to participate in the issue. They will compile a list of the houses that have good distributing facilities and clienteles. The syndicate manager will take account of sales staffs, over-the-counter connections, affiliations with institutional investors, and past willingness to take difficult issues along with readily salable issues. An invitation to participate in a selling group will then be sent by letter, specifying the nature of the participation offered. The participant will be offered the right to make a firm subscription to a fixed amount of securities or to subscribe to any amount subject to allotment by the syndicate manager. The fixed allotment is more commonly used. The issue is priced to the selling group at the public offering price less a concession representing a substantial portion of the gross spread between the price to the purchase

syndicate and the offering price. Formerly, it was common to form a selling syndicate that purchased the issue from the purchase syndicate at a step-up in price. The selling syndicate thereby relieved the purchase syndicate of its risks. However, the selling syndicate has now largely disappeared. The purchase syndicate carries the risk until the securities are disposed of through the selling group. Members of the selling group will, of course, subscribe to, or accept allotments of, issues according to the possibilities of resale to their clients.

Purpose of the Selling Group.—Selling groups are organized in order to give wide distribution and quick sale to securities. Financial markets change very rapidly; consequently an issue must be sold promptly to avoid possibilities of loss. This promptness can be obtained by interesting large numbers of distributors in small amounts of the issue. Wide diversification is necessary to reduce sales resistance and meet the needs of investors. Investors usually seek to diversify their accounts. Hence, if an investment house tended to bring out too many securities of the same companies or in the same industry, the investor would soon seek another firm. This difficulty is obviated by houses participating in issues originated by other firms. Thus all issues tend to be diffused over a large clientele.

Pure Underwriting.—Sometimes a corporation offers its shareholders the right to subscribe to convertible bonds or shares of a new issue of stock. A reorganization plan usually offers old security holders the right to take securities in the reorganized company on payment of an assessment. In such cases the corporation is not always sure that its security holders will take up the new issues. If there is any real danger of the issue failing, the corporation will make an agreement with bankers that they will take the unsold portion of the securities. In this way the corporation will be assured of the funds. It will pay the bankers a commission for underwriting the success of the issue. This commission will amount to giving the bankers a discount on the portion taken if the issue fails. The commission may be a clear profit if the issue

succeeds. However, frequently the bankers maintain the market of the company's securities during the offering period; so they may incur some costs though they do not have to take any securities directly. In other cases, the bankers take substantial losses as the following item from the *New York Times* of October 16, 1937, plainly indicates.

> BETHLEHEM SYNDICATE ENDS.—The new Bethlehem Steel 3½% convertible debentures, publicly offered last week at 95½, were finally allowed to seek their own level in the market yesterday morning by the decision to terminate the underwriting agreement late on Thursday. Unsupported by the syndicate, the debentures opened at 86 bid, 86½, and later in the day became fairly well stabilized around 87. This represents a drop of about 8½ points from the offering price and a loss of 11 points to the underwriting group from the price at which the issue was purchased from the company, or in the neighborhood of $5,000,000. The history of this financing since the original offering was made to stockholders of record on Sept. 8 has been one of repeated reverses caused by the severe decline in the company's stock. The case is regarded as an example of the risks involved by underwriters in making long commitments as well as of the value of underwriting from the viewpoint of the borrower. The financing by Bethlehem Steel was intended in part to replace funds for expansion which would otherwise have been provided out of retained earnings and would have been subject therefore to a heavy surtax as undistributed profits.

Maintaining the Market.—The price of an issue must be kept stable for best results in selling. If it falls, such falling will discourage purchasers. If it rises, purchasers may be induced to make a quick profit by throwing the securities back on the market. The syndicate tries to prevent the security from moving in such a way as to handicap selling operations by authorizing its manager to buy and sell securities in the market. Thus orders to buy several bonds will be placed in the market at half a point below the selling price. Orders to buy a larger amount of bonds will be placed at a point below the offering price; and so on. Orders to sell several bonds will be placed at a half point above the offering price; more at a point above; and so on. Thus by purchasing bonds if they

tend to fall in price and selling them if they tend to rise in price, the syndicate stabilizes the market until the issue has been distributed. Purchased securities are charged back to the account of the original seller.

If such stabilization is limited to creating an orderly market and not extended to creating an artificial price, it is both legitimate and desirable. Incidentally, it might be pointed out that, as a matter of policy, the United States Treasury and the Federal Reserve System support the securities of the federal government. However, since the maintained issue has not yet found its unsupported level, many investment counselors caution their clients against buying new issues.

Blue Sky Laws.—Various statutes have been passed for the protection of the investor. The federal government has set up an elaborate machinery for the regulation of issuing and trading securities. Many state legislatures had passed some type of securities legislation long before the federal acts of 1933 and 1934 were enacted by Congress. The state acts can be grouped into two classes, the anti-fraud acts and the regulatory acts. The anti-fraud acts make no attempt to regulate security issues. Rather, they set up state machinery for the prosecution of sellers of fraudulent securities. The extent of the regulation in New York was the requirement that dealers file information about themselves with the Department of State. This information was then available to the attorney general in case he sought to prosecute the dealers. An overwhelming majority of the states have the regulatory type of legislation. This type, which started in Kansas in 1911, usually requires that dealers be licensed and that specified types of security issues be licensed. The license forms for dealers elicit information from which the dealers' financial responsibility can be inferred and by means of which the authorities can watch the dealers' activities. The requirement of a license for issues gives the authorities an opportunity to check over certain elementary financial details of the concern. The federal acts go much further than any state laws went. The Securities Act of 1933, as amended, requires the corporation to file very

complete financial, accounting, legal, and trade information with the Securities and Exchange Commission at Washington before the issue is sold. This information is open to the inspection of the investing public but is not generally used by the public. Investment services publish excerpts from the registration statements of securities issues, and it is in this way that the public gets chief benefit from the details filed with the commission. Aside from the benefits of disclosure of investment information, the Securities Act gives the Securities and Exchange Commission power to compel disclosure when the registration statement is inadequate and power to prosecute in cases of false or fraudulent registration statements. Those responsible for false registration statements are made civilly liable to injured purchasers. The Securities Exchange Act of 1934 gives the commission extensive powers over securities exchanges and markets with power to prevent manipulation of prices. This act also gives the commission a considerable amount of power to enforce sound accounting and report practices in the field of corporate accounting.

Underwriting Costs.—On November 1, 1937, the Securities and Exchange Commission published statistics showing the cost of underwriting security issues for the five quarterly periods from July 1, 1936, to September 30, 1937.

The following tables show gross underwriting spreads on bond issues of $5,000,000 or more, preferred stocks of $1,000,000 or more, and common stocks of $1,000,000 or more in each of the five quarters:

Period	No. of Issues	Average Spread (Percentage of Public Offering Prices) Unweighted	Weighted (a)
BOND ISSUES			
Third quarter, 1936	18	2.16	2.05
Fourth quarter, 1936	33	2.19	2.12
First quarter, 1937	14	2.21	2.22
Second quarter, 1937	9	2.08	2.05
Third quarter, 1937	3	2.04	2.01
PREFERRED STOCKS			
Third quarter, 1936	4	4.23	3.97
Fourth quarter, 1936	14	6.48	5.40
First quarter, 1937	13	7.76	4.25
Second quarter, 1937	9	5.30	2.90
Third quarter, 1937	8	7.30	4.14

Common Stocks

Third quarter, 1936	16	12.80	13.11
Fourth quarter, 1936	11	17.54	16.78
First quarter, 1937	14	15.43	15.11
Second quarter, 1937	22	13.12	12.50
Third quarter, 1937	4	13.58	12.65

The following table gives the proportions of the gross spread paid to dealers distributing bond issues:

Period	No. of Issues	Average Selling Group Commissions (Percentage of Gross Spread) Unweighted	Weighted (a)
Fourth quarter, 1936	46	43.8	40.7
Third quarter, 1936	27	46.2	41.6
First quarter, 1937	24	46.1	43.4
Second quarter, 1937	23	48.7	45.8
Third quarter, 1937	4	41.4	43.8

(a) Weighted by the dollars of gross proceeds of each issue, thus giving the figure for each issue a significance equal to the proportion of the value of the issue to the value of all issues.

Expenses of registration and flotation of bond, preferred stock, and common stock issues, exclusive of gross underwriting spreads, are shown in the following table: (The Commission said this analysis was approximate, being based on estimates, and should be regarded only as an indication of the actual distribution of expenses):

127 Bond Issues

Type of Expense	Total (in thousands of dollars)	Per Cent of Total	Per Cent of Gross Revenues
Registration fee	$ 237	1.59	.01
Revenue stamp	2,203	14.80	.09
State qualifying fees	452	3.04	.02
Transfer agent	2,632	17.69	.11
Printing and engraving	2,754	18.50	.11
Legal	2,975	19.99	.12
Accounting	1,384	9.30	.06
Engineering	377	2.53	.02
Miscellaneous	1,870	12.56	.08
Grand total	$14,884	100.00	.62

71 Preferred Stock Issues

Registration fee	$ 54	1.58	.01
Revenue stamp	450	13.31	.09
Transfer agent	169	5.03	.03
State qualifying fees	204	6.04	.04
Printing and engraving	619	18.33	.13
Legal	991	29.34	.20
Accounting	400	11.84	.08
Engineering	54	1.06	.01
Miscellaneous	437	12.93	.09
Grand total	$3,378	100.00	.68

103 Common Stock Issues

Registration fee	$ 32	.84	.01
Revenue stamp	242	6.41	.09
State qualifying fees	101	2.68	.04
Transfer agent	432	11.42	.15
Printing and engraving	588	15.55	.21
Legal	1,030	27.24	.37
Accounting	615	16.28	.22
Engineering	69	1.82	.02
Miscellaneous	672	17.76	.24
Grand total	$3,781	100.00	1.35

Underwriting spreads vary, of course, with the credit of the company and the size and type of issue.

Federal Regulation of Securities.—The Securities Act of 1933 requires the registration of security issues with the Securities and Exchange Commission if the mails or any instruments of interstate communication or transportation are used in their sale or delivery. This broad jurisdiction reaches most securities used in corporate financing.

The registration statement must be signed by the principal officers and a majority of the board of directors of the issuing corporation. Such signatures make the signers subject to civil suit and criminal prosecution if the statements prove false or misleading. The statements are on file in Washington and photostatic copies can be obtained at a nominal cost.

Securities cannot be sold until the registration statement becomes effective. The statement normally becomes effective 20 days after filing. However, the Commission can refuse to issue a permit to sell or can issue a stop order if it appears that the statement is false, insufficient, or misleading as to a material fact. The commission can also bring actions in the federal courts for prohibitory and mandatory injunctions.

The real importance of the act lies in its requirements of broad disclosure of financial facts. These requirements are found in Schedule A, which is as follows:

Schedule A

(1) The name under which the issuer is doing or intends to do business;

(2) the name of the State or other sovereign power under which the issuer is organized;

(3) the location of the issuer's principal business office, and if the issuer is a foreign or territorial person, the name and address of its agent in the United States authorized to receive notice;

(4) the names and addresses of the directors or persons performing similar functions, and the chief executive, financial and accounting officers, chosen or to be chosen if the issuer be a corporation, association, trust, or other entity; of all partners, if the issuer be a partnership; and of the issuer, if the issuer be an individual; and of the promoters in the case of a business to be formed, or formed within two years prior to the filing of the registration statement;

(5) the names and addresses of the underwriters;

(6) the names and addresses of all persons, if any, owning of record or beneficially, if known, more than 10 per centum of any class of stock of the issuer, or more than 10 per centum in the aggregate of the outstanding stock of the issuer as of a date within twenty days prior to the filing of the registration statement;

(7) the amount of securities of the issuer held by any person specified in paragraphs (4), (5), and (6) of this schedule, as of a date within twenty days prior to the filing of the registration statement, and, if possible, as of one year prior thereto, and the amount of the securities, for which the registration statement is filed, to which such persons have indicated their intention to subscribe;

(8) the general character of the business actually transacted or to be transacted by the issuer;

(9) a statement of the capitalization of the issuer, including the authorized and outstanding amounts of its capital stock and the proportion thereof paid up, the number and classes of shares in which such capital stock is divided, par value thereof, or if it has no par value, the stated or assigned value thereof, a description of the respective voting rights, preferences, conversion and exchange rights, rights to dividends, profits, or capital of each class, with respect to each other class, including the retirement and liquidation rights or values thereof;

(10) a statement of the securities, if any, covered by options outstanding or to be created in connection with the security to be offered, together with the names and addresses of all persons, if any, to be allotted more than 10 per centum in the aggregate of such options;

(11) the amount of capital stock of each class issued or included in the shares of stock to be offered;

(12) the amount of the funded debt outstanding and to be created by the security to be offered, with a brief description of the date,

maturity, and character of such debt, rate of interest, character of amortization provisions, and the security, if any, therefor. If substitution of any security is permissible, a summarized statement of the conditions under which such substitution is permitted. If substitution is permissible without notice, a specific statement to that effect;

(13) the specific purposes in detail and the approximate amounts to be devoted to such purposes, so far as determinable, for which the security to be offered is to supply funds, and if the funds are to be raised in part from other sources, the amounts thereof and the sources thereof, shall be stated;

(14) the remuneration, paid or estimated, to be paid, by the issuer or its predecessor, directly or indirectly, during the past year to (a) the directors or persons performing similar functions, and (b) its officers and other persons, naming them wherever such remuneration exceeded $25,000 during any such year;

(15) the estimated net proceeds to be derived from the security to be offered;

(16) the price at which it is proposed that the security shall be offered to the public or the method by which such price is computed and any variation therefrom at which any portion of such security is proposed to be offered to any persons or classes of persons, other than the underwriters, naming them or specifying the class. A variation in price may be proposed prior to the date of the public offering of the security, but the Commission shall immediately be notified of such variation;

(17) all commissions or discounts paid or to be paid, directly or indirectly, by the issuer to the underwriters in respect of the sale of the security to be offered. Commissions shall include all cash, securities, contracts, or anything else of value, paid, to be set aside, disposed of, or understandings with or for the benefit of any other persons in which any underwriter is interested, made, in connection with the sale of such security. A commission paid or to be paid in connection with the sale of such security by a person in which the issuer has an interest or which is controlled or directed by, or under common control with, the issuer shall be deemed to have been paid by the issuer. Where any such commission is paid the amount of such commission paid to each underwriter shall be stated;

(18) the amount or estimated amounts, itemized in reasonable detail, of expenses, other than commissions specified in paragraph (17) of this schedule, incurred or borne by or for the account of the issuer in connection with the sale of the security to be offered or

properly chargeable thereto, including legal, engineering, certification, authentication, and other charges;

(19) the net proceeds derived from any security sold by the issuer during the two years preceding the filing of the registration statement, the price at which such security was offered to the public, and the names of the principal underwriters of such security;

(20) any amount paid within two years preceding the filing of the registration statement or intended to be paid to any promoter and the consideration for any such payment;

(21) the names and addresses of the vendors and the purchase price of any property, or good will, acquired or to be acquired, not in the ordinary course of business, which is to be defrayed in whole or in part from the proceeds of the security to be offered, the amount of any commission payable to any person in connection with such acquisition, and the name or names of such person or persons, together with any expense incurred or to be incurred in connection with such acquisition, including the cost of borrowing money to finance such acquisition;

(22) full particulars of the nature and extent of the interest, if any, of every director, principal executive officer, and of every stockholder holding more than 10 per centum of any class of stock or more than 10 per centum in the aggregate of the stock of the issuer, in any property acquired, not in the ordinary course of business of the issuer, within two years preceding the filing of the registration statement or proposed to be acquired at such date;

(23) the names and addresses of counsel who have passed on the legality of the issue;

(24) dates of and parties to, and the general effect concisely stated of every material contract made, not in the ordinary course of business, which contract is to be executed in whole or in part at or after the filing of the registration statement or which contract has been made not more than two years before such filing. Any management contract or contract providing for special bonuses or profit-sharing arrangements, and every material patent or contract for a material patent right, and every contract by or with a public utility company or an affiliate thereof, providing for the giving or receiving of technical or financial advice or service (if such contract may involve a charge to any party thereto at a rate in excess of $2,500 per year in cash or securities or anything else of value), shall be deemed a material contract;

(25) a balance sheet as of a date not more than ninety days prior

to the date of the filing of the registration statement showing all of the assets of the issuer, the nature and cost thereof, whenever determinable, in such detail and in such form as the Commission shall prescribe (with intangible items segregated), including any loan in excess of $20,000 to any officer, director, stockholder or person directly or indirectly controlling or controlled by the issuer, or person under direct or indirect common control with the issuer. All the liabilities of the issuer in such detail and such form as the Commission shall prescribe, including surplus of the issuer showing how and from what sources such surplus was created, all as of a date not more than ninety days prior to the filing of the registration statement. If such statement be not certified by an independent public or certified accountant, in addition to the balance sheet required to be submitted under this schedule, a similar detailed balance sheet of the assets and liabilities of the issuer, certified by an independent public or certified accountant, of a date not more than one year prior to the filing of the registration statement, shall be submitted;

(26) a profit and loss statement of the issuer showing earnings and income, the nature and source thereof, and the expenses and fixed charges in such detail and such form as the Commission shall prescribe for the latest fiscal year for which such statement is available and for the two preceding fiscal years, year by year, or, if such issuer has been in actual business for less than three years, then for such time as the issuer has been in actual business, year by year. If the date of the filing of the registration statement is more than six months after the close of the last fiscal year, a statement from such closing date to the latest practicable date. Such statement shall show what the practice of the issuer has been during the three years or lesser period as to the character of the charges, dividends or other distributions made against its various surplus accounts, and as to depreciation, depletion, and maintenance charges, in such detail and form as the Commission shall prescribe, and if stock dividends or avails from the sale of rights have been credited to income, they shall be shown separately with a statement of the basis upon which the credit is computed. Such statement shall also differentiate between any recurring and nonrecurring income and between any investment and operating income. Such statement shall be certified by an independent public or certified accountant;

(27) if the proceeds, or any part of the proceeds, of the security to be issued is to be applied directly or indirectly to the purchase of any business, a profit and loss statement of such business certified by

an independent public or certified accountant, meeting the requirements of paragraph (26) of this schedule, for the three preceding fiscal years, together with a balance sheet, similarly certified, of such business, meeting the requirements of paragraph (25) of this schedule of a date not more than ninety days prior to the filing of the registration statement or at the date such business was acquired by the issuer if the business was acquired by the issuer more than ninety days prior to the filing of the registration statement;

(28) a copy of any agreement or agreements (or, if identic agreements are used, the forms thereof) made with any underwriter, including all contracts and agreements referred to in paragraph (17) of this schedule;

(29) a copy of the opinion or opinions of counsel in respect to the legality of the issue, with a translation of such opinion, when necessary, into the English language;

(30) a copy of all material contracts referred to in paragraph (24) of this schedule, but no disclosure shall be required of any portion of any such contract if the Commission determines that disclosure of such portion would impair the value of the contract and would not be necessary for the protection of the investors;

(31) unless previously filed and registered under the provisions of this title, and brought up to date, (a) a copy of its articles of incorporation, with all amendments thereof and of its existing by-laws or instruments corresponding thereto, whatever the name, if the issuer be a corporation; (b) copy of all instruments by which the trust is created or declared, if the issuer is a trust; (c) a copy of its articles of partnership or association and all other papers pertaining to its organization, if the issuer is a partnership, unincorporated association, joint-stock company, or any other form of organization; and

(32) a copy of the underlying agreements or indentures affecting any stock, bonds, or debentures offered or to be offered.

In case of certificates of deposit, voting trust certificates, collateral trust certificates, certificates of interest or shares in unincorporated investment trusts, equipment trust certificates, interim or other receipts for certificates, and like securities, the Commission shall establish rules and regulations requiring the submission of information of a like character applicable to such cases, together with such other information as it may deem appropriate and necessary regarding the character, financial or otherwise, of the actual issuer of the securities and/or the person performing the acts and assuming the duties of depositor or manager.

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CHAPTER 13

THEORY OF ISSUING SECURITIES

Financing Problem.—Two general points of view must be kept in mind in framing the securities structure of a corporation: (1) the securities structure must conform to the asset structure of the business, and (2) it must so distribute income, risk, and control that the business will function smoothly and be able to raise new funds whenever necessary. These principles apply alike to simple and to consolidated companies. It makes little difference whether we create a business unit directly or whether we create it from several smaller units. The fundamental nature of assets does not change. Nor do the fundamental relationships of securities to earnings and of securities to assets change. Some modifications of financial structure are frequently found in consolidated companies; but these are usually the result of accommodating the original financial structures of constituent companies, not changes in principles. The principles here stated underlie discussion of all types of financial structures hereafter mentioned in the book.

Asset Structure.—The accompanying diagram summarizes the discussion of asset structure contained in the preceding chapters. As previously pointed out, the business will secure temporary (variable) working capital by short-term borrowing. It will secure a small amount of regular (required throughout the year) working capital from trade creditors by not paying for goods until the end of the cash discount period. It will secure the rest of its regular capital requirements, both working and fixed, through sale of long-term securities, so that no creditor can embarrass the company by cutting off necessary funds. The only difference between promoting a new enterprise and promoting a consolidation of several old enterprises is that in the first case the securities structure constitutes a

means of raising capital to provide the prospective assets; in the latter case, it constitutes a means of apportioning the rights to existing assets and to the earnings that go with them. In so far as the issue of long-term securities is concerned, it would be no safer for a consolidated company to jeopardize its solvency by obtaining permanently required capital on short-term contracts than it would be for a simple corporate enterprise to do the same thing.

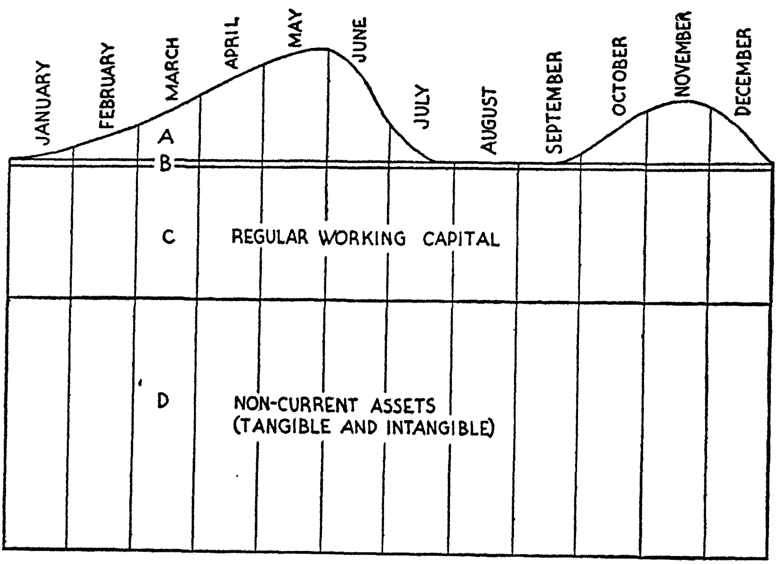

Figure 14. Diagram of Asset Structure

A = Assets supplied by short-term borrowing.
B = Assets supplied by normal discount period.
C and *D* evidenced by long-term securities.

Income, Risk, and Control.—The problem of distributing income, risk, and control resolves itself into a choice of types of securities. As risk increases, income should rise to compensate for taking the risk. As risk increases, control should increase so that the holder of the security will be in a position to take action to meet the risk. Hence, risk, income, and control should go together. The bondholder is sheltered from risk by the stockholders' investment. The stockholder must lose all

before the bondholder loses. Because he is placed in a sheltered position, the bondholder is given a low rate of interest and no voting power. On the other hand, the common stockholder bears the first losses, takes the residual earnings, however large, and retains voting control. He is in a position to change the management and meet the changing risks. As bonds become more risky by liberal issue, interest rates rise to compensate for the risk. As preferred stock becomes more risky, the specified rate of dividend rises. All standards for the issue of securities are relative to the rate of interest or dividends carried by those securities. Thus a public utility bond of a company which has a single mortgage debt not exceeding 60% of its assets, whose interest charges are earned two to two and a half times on the average, and whose charges are earned once with a margin in the poorest year will sell normally to yield 5 to 5½% per annum. This standard does not mean that weaker bonds cannot be sold. They can, but their interest yield will rise so that the higher rate will compensate the investor for the greater risks. Weak bonds may have to carry 6% or even more as the standard becomes progressively weaker. Hence, all later discussion is based on an assumed income yield on securities.

Facilitating Future Financing.—The securities plan has two objectives: (1) to raise capital for the present undertaking (or to consolidate existing structures) and (2) to facilitate future financing. That is, the corporate organization is intended to go on. Immediate financing is important, but the future must not be lost sight of. As the business grows and expands, it will need more capital; as present bond issues become due, the company will have to put out refunding issues. Under these circumstances the financial structure must be built to stand up under long-range conditions. This means that technical provisions must be made for growth and that economic relationships must be kept such that the new securities will be attractive to investors.

Technical provision is made by creating open end mortgages and by providing substantial amounts of authorized but un-

issued preferred and common stock. Economic relationships are kept attractive by keeping fixed charges well within earning power of the corporation so that new issues will be readily salable. In some corporations bonds are not issued; so when an emergency arises, the company can mortgage the plant to get new funds. Hudson Motor Car Company resorted to a mortgage on its unmortgaged plant in the 1929-1937 depression. Other companies merely fail to use their full borrowing power during normal times.

Investment Standards.—Since securities are sold to investors, financing must take account of investment standards. Lawrence Chamberlain has laid down[1] what he designates the ten elements of an ideal investment:

1. Security of principal
2. Stability of income
3. Fair income return
4. Marketability
5. Value as collateral
6. Tax exemption
7. Exemption from care
8. Acceptable duration
9. Acceptable denomination
10. Potential appreciation

It will be noted that the first three of these are basic in setting up the securities structure. Fundamentally they involve the future relationships of securities to earnings and assets. The other elements mentioned involve either minor problems of fitting issues to investor's tastes or are dependent principally on the first three. Since these relationships are so important, they will be discussed in some detail.

Relationships to Earnings.—The essence of all sound financing is successful prediction of the future earnings of an enterprise. The end and object of a business undertaking is to "make money." Securities find their ultimate value in the

[1] Chamberlain, L. and Edwards, G. W., *The Principles of Bond Investment*, Ch. 3, Henry Holt & Co., New York, 1927.

income that they entail. Hence, the relationship of bonds, preferred stock, and common stock to earnings is fundamental. This relationship has two aspects: (1) the amount of income accruing to bonds or shares and (2) the regularity or stability of that income.

The amount of income attaching to a single bond or preferred share is determined by studying the yields of similar securities in the market at the time the issue is brought out. Under ordinary circumstances the company feels no reluctance to sell an issue of bonds or preferred stock at lower yield than long-term conditions warrant because, if new financing is necessary at a later date, a higher yield issue can be put out to attract the necessary investment funds. Since the enterprise is presumably run for the benefit of the common stockholders, the lower the yield obtainable, the better. However, it is otherwise with common stock, for the new stock ranks equally with the old, and unless experience has been satisfactory in the past, the public will not purchase a new issue on satisfactory terms (especially at par value for shares having par value). Equity issues, therefore, involve long-term yield considerations.[2] These are best resolved by studying yields of similar enterprises over a considerable period and then modifying the conclusions to meet probable future conditions. Technically the supply price of the use of capital includes pure interest, premium for risk, and wages of management. However, at any given time the capital market places a composite value on these elements. This value is the current yield of securities having the same interest, risk, and management factors. Direct reference to the capital market, which itself ultimately determines whether an enterprise is over- or undercapitalized, affords the best means of settling the rate of capitalization for individual securities.

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[2] The J. P. Morgan & Company statement to the Senate Committee on Banking and Currency put the matter thus: "It is not the practice of responsible bankers and dealers in pricing a new equity issue to charge all the traffic will bear—it would be inexcusable to do so in an inflation market such as prevailed in 1929—but rather to name a fair price (based on actual and expected earnings, not speculative market quotations), and stick to that price with all those invited to subscribe to the original issue, whether public or private." (*Reprints of Statements Submitted by Members of J. P. Morgan & Co. to Senate Committee on Banking and Currency at Its Hearings in Washington, May 23 to June 9, 1933*, p. 19.)

Interest.—The determination of the proper relationship of the aggregate amount of bond interest to earnings is not simple. Whereas it does not damage the credit of the company seriously to sell bonds at a subnormal yield during a favorable condition in the capital market, it does damage credit seriously to sell too many bonds. The aggregate interest burden must not exceed conservative limits if the company is to be able to finance economically in the future. The bond interest should be earned by a safe margin in the poorest year, and it should be earned by a considerable margin on the average. What constitutes a safe margin is the amount of coverage that will allay any feeling on the part of the investing public that the bond interest will not continue to be earned. What constitutes ample average coverage varies with the risk element, but in the final analysis the investing public sets certain terms for different industries. Investment literature abounds with statements that bond interest should be earned twice on the average; but like all financial rules of thumb this standard should be applied only to a limited number of the most stable companies. It does not fit the rank and file of enterprises. Each case must be decided on its individual merits, but the standard can be related back to actual market experience of similar securities. The accompanying table shows average times interest earned figures for representative companies. (See page 208.)

Returning to the matter of earnings in the poorest year, it will be noted that the necessity for complete coverage of interest in the poorest year is not pressing if the company has sufficient cash resources to make payments until earnings are again ample. But for general purposes this qualification is of little avail in maintaining market prices. Past experience has shown that managements cannot always be trusted to foresee depressions, nor can they be trusted to have abundant cash resources when cash resources are most necessary. Depression periods are literally strewn with the cases of corporate managements which dissipated cash resources in the early stages of depression only to be seriously embarrassed for lack of cash in the later stages. Because of this general lack of foresight on the part of corporate managements, the investing public

COVERAGE OF INTEREST CHARGES, SELECTED COMPANIES 1936-1924

Company	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924
Railroads													
Atchison, Topeka & S. Fe.	1.77	1.74	1.54	1.52	1.87	3.27	4.59	6.69	6.52	6.70	7.64	6.08	5.62
Chesapeake & Ohio	5.27	4.18	3.85	3.71	3.72	3.49	4.21	4.64	4.19	3.96	3.73	2.71	2.09
Illinois Central	1.04	0.48	0.94	1.01	0.77	0.77	1.59	1.84	1.84	1.76	2.18	2.29	2.26
New York Central	1.16	1.00	0.87	0.91	0.70	1.04	1.62	2.33	2.13	2.29	2.23	2.10	1.80
Northern Pacific	1.13	1.03	1.06	1.02	0.86	1.62	2.19	2.50	2.44	2.26	2.42	2.21	2.08
Pennsylvania	1.49	1.29	1.23	1.23	1.17	1.25	1.88	2.26	2.05	1.87	1.88	1.83	1.54
Southern	1.26	0.91	0.84	0.96	0.23	0.59	1.63	2.25	2.32	2.50	2.63	2.56	2.25
Southern Pacific	1.47	1.08	1.01	0.85	0.82	1.23	2.01	2.62	2.35	2.19	2.37	2.34	2.46
Union Pacific	2.10	9.09	2.96	2.42	2.37	2.72	3.54	3.89	3.62	3.24	3.30	3.14	3.00
Public Utilities													
Cleveland Electric Ill.	6.31	4.68	3.80	3.36	3.94	4.18	4.27	4.43	3.71	3.63	4.37	4.38	4.75
Consol. Gas etc., Balt.	2.36	2.26	2.17	2.94	3.12	3.38	3.61	3.76	3.03	2.69	2.90	2.79	2.33
Consol. Edison	2.82	2.45	2.55	3.15	4.34	6.18	6.13	6.51	5.87	4.97	4.66	3.99	4.31
Commonwealth Edison	2.50	2.27	2.23	2.00	2.03	3.33	3.67	3.77	3.62	3.43	3.42	3.37	3.23
Detroit Edison	2.88	2.53	2.09	1.92	2.06	2.92	2.86	3.27	3.26	3.01	3.35	3.00	2.47
Edison Electric, Boston	2.98	2.61	2.32	2.25	2.64	3.23	3.16	3.87	4.17	4.18	3.93	4.38	5.06
Pacific Gas & Electric	2.76	2.61	2.35	2.09	2.18	2.37	2.39	2.52	2.25	1.96	2.06	2.05	2.06
Public Serv. Corp. of N. J.	3.05	2.89	2.87	3.00	3.01	2.90	2.85	2.86	2.34	1.76	1.70	1.50	1.42
Industrials													
Baldwin Locomotive	0.31	d0.5	d1.6	d3.4	d3.6	d2.3	4.16	4.71	1.49	4.60	6.00	1.24	2.35
Bethlehem Steel	3.21	1.59	1.08	d0.3	d1.8	1.02	4.32	4.77	2.65	2.38	2.62	2.06	1.67
General Baking	****	****	9.33	6.84	10.9	11.8	18.9	****	****	****	****	****	****
Goodyear T. & Rubber	4.71	2.96	2.48	2.47	0.69	2.21	3.03	4.62	3.37	3.17	2.26	6.62	4.24
International Bus. Mach.	40.0	****	****	91.6	55.3	45.8	41.3	31.1	17.9	14.6	12.2	9.24	7.37
S. S. Kresge	****	****	11.6	7.73	4.71	7.56	9.19	****	****	****	****	****	****
Liggett & Myers	22.3	15.4	18.1	12.6	14.7	14.7	15.2	13.9	12.3	11.8	11.2	9.79	7.68
P. Lorillard	5.72	4.73	4.21	3.52	5.10	3.72	2.82	1.66	1.89	2.53	4.36	5.60	5.22
National Dairy Prod.	6.10	4.05	3.22	3.19	3.89	6.04	6.84	10.4	6.99	6.45	6.29	4.67	****
United States Steel	13.56	2.02	d3.3	d6.1	d12.4	3.38	19.5	26.2	8.10	6.30	7.80	6.10	5.70

d = deficit. **** = no bonds in these years.

attaches more importance to actual earnings coverage than it does to the possibility that the management may see hard times coming and prepare for them. This, then, is the real basis for requiring that estimated future earnings cover interest in the poorest year.

The requirement that the total interest charges bear a conservative relationship to earnings is directed to two points. First, there should be no possibility of jeopardizing the solvency of the enterprise; but more especially, credit should be such that future financing on an economical basis will at all times be possible. That is, financing should be possible in periods of depression. At the time of original financing, no person can foresee whether important financing will have to be faced in a future period of depression; so all financial plans should provide for that contingency. Hence, total interest charges should be kept within conservative limits.

These statements hold for consolidated companies as well as for simple companies. Dogmatically we can say that consolidated interest charges should not exceed consolidated earnings in the poorest year any more than should the interest charges of a simple company. Consolidated companies vary from the simple situation only to the extent that greater diversity of operations may make minimum earnings relatively greater for the consolidated company. In respect to the ratio of interest charges to average earnings the consolidated company can have a higher ratio than the simple company only if greater diversity of operations gives greater stability to earnings and greater size gives greater competitive protection. In other words, the consolidated company can no more transgress with impunity the prime relationships of interest charges to total income than can the original corporations.

Preferred Dividends.—Dividends of highest grade preferred stock should be covered in the poorest year. In fact, the nearer preferred stock approaches an investment basis the closer it must conform to the principles of bond financing. If the investing public is to purchase preferred stock on a low yield basis, it must have ample assurances that the dividends

will be paid. Such assurances involve dividend relationships to average earnings as well as relationships to minimum earnings. The principles are the same as those applying in cases of bond interest. Investment literature presents the rule of thumb that whereas bond interest may absorb one-half of total income, bond interest plus preferred dividends may absorb up to three-fourths of total recurring income of the most stable companies. However, as income becomes less stable and less dependable, the proportion of income that can safely be taken for these charges must be sharply reduced. Each case must be analyzed on its own merits. Of course, if the preferred stocks are to be made more speculative, these standards will be disregarded. In this case the yield of the stock will rise with the risk. The principles apply alike to consolidated and simple companies.

Earnings on Common Stock.—During normal times, earnings on common stock should be sufficient to keep the market price of the stock at or above par, or at or above stated value for no-par stock. If stock cannot be maintained at this level of price, difficulty will be encountered in future financing. This standard applies without change, regardless of the type of company.

Relationships to Assets.—As is pointed out more fully in a later chapter, the value of a business as a whole and of fixed assets as a separate class depends on earning power. Much of the value of assets is locked up in the earning power of the individual establishment, and the enterprise must itself succeed if these values are to be realized. This is not true of all of the individual assets; for although some are inseparably bound up with the fate of the enterprise, others can be transferred to other enterprises or to other uses and hence have independent values. It is the assets of independent value that are of primary importance in determining the relationship of securities to assets. The following excerpt from the 1923 "Report of the Industrial Securities Committee" of the Investment Bankers Association of America[3] states the situation in considerable detail:

[3] *Proceedings,* pp. 215-216.

A company can raise money on the strength of its fixed assets, its current assets, and its earning power. A mortgage involves giving the investor a lien on supposedly salable property. In the case of an unsecured debenture or note, the money is advanced on the general character and credit of the company, and the expectation that it will conserve and increase its assets, both permanent and current, so as to have on hand always a safe margin over the amount of the loan. Common stock represents a share in the ownership with all the risks of the business and all the rewards. Preferred stock is simply a top slice, so to speak, of the common stock, receiving preference in liquidation of assets and a fixed income somewhat higher than the going interest rates, but foregoing any further rewards.

A company's mortgageable properties are usually real estate, plant and equipment, natural resources such as coal or timber, or occasionally stocks of a salable commodity such as copper or oil. A company owning valuable real estate can ordinarily raise money on it regardless of its use. If the company has an expensive manufacturing plant, the amount for which this can be mortgaged depends, or should depend, on the amount that other people would pay for it for their own uses—for the same kind of business or for some similar business requiring the same sort of plant—not necessarily at forced sale but at careful sale within a reasonable time. And it must be assumed that a purchaser will be found only at a price that would be cheaper than the cost of building or buying as satisfactory a plant elsewhere. In order to be good mortgage security, property should possess three qualities—continued usefulness, substantial value at the end of a term of years, and ready salability at all times. Ordinary manufacturing machinery and equipment—as for example, might exist in a rented factory—is usually not mortgageable, but transportation equipment, such as tank cars, ore steamers, etc., may properly be the basis of equipment mortgages. Even with valuable plant and machinery, it may not be practicable to raise money on mortgages—as in the case of the New England textile concerns, where the customary banking arrangements tend to discourage such mortgaging of fixed assets.

Coal lands and ore lands containing admittedly valuable deposits can be mortgaged for a long term, if a sinking fund is provided to reduce the loan as production reduces the coal or ore. The same is true of timber lands. The same is also true of accumulated stocks of staple commodities which are simply carried on loans awaiting a favorable market, when the proceeds of sale go specifically to retire the loans.

Current assets can be used as a basis for raising funds, not on mortgage, but on unsecured bonds or notes or bank loans, which ordinarily rank alike. The amount which can be borrowed is based on the margin of current assets over current liabilities, or the so-called net quick assets or working capital. As these assets are constantly shifting, they cannot be specified as security for a loan. Accordingly the loan is made against a lump sum of net quick assets which the company agrees to maintain at not less than a specified proportion to the amount of loans which rank equally against these assets. Thus the security of the investor rests on the promise of the company that the assets will be available at all times, rather than on the ability to go in and take possession of certain specified properties.

Working capital may decrease through losses instead of profits on sales; from inventory value shrinkage, or the failure of customers to pay up; and from the depletion of cash assets through payment of interest and dividends. Of all these causes of decrease in assets, only one—that of dividend payments—is entirely within the company's control, which leads to the customary provision that the company shall not, by dividend payments, reduce its net quick assets below a certain point. The other contingencies only can be guarded against, from the investor's point of view, by advancing a comparatively small amount, as 50% for example, against the net quick assets. If the company makes an unsecured loan against its combined fixed and net current assets, it usually agrees not to mortgage its fixed assets, and to keep intact a specified proportion of total assets to the amount of the loan and a specified proportion of net quick assets as well. In this case, with the further security of the unmortgaged fixed assets, the proportion of the loan to the net quick assets can be considerably greater than if the net quick assets stood alone.

High Grade Bonds.—The theory of bond financing is that the bondholder takes a limited return plus a sheltered position in lieu of an unlimited return and unlimited risks. Since the bondholder does not share in increased profits of the enterprise, he should be protected against loss. Hence, his claim should be amply protected without counting on values primarily incidental to a going concern. In case the enterprise should fail, he ought still to be able to realize the amount of his claim. Carried to its logical conclusion, this principle requires that all debts be covered by an ample amount of assets

at their liquidation values. For competitive companies, these liquidation values are found primarily in current assets, real estate, and natural resources (e.g., coal and timber), and only to a small extent in specialized fixed assets which will probably have little value if they cannot be made to succeed in the present enterprise. As a corollary of this requirement, protective covenants must be so drawn that these assets can be realized upon before they have been dissipated. This requirement is especially important where current assets constitute the chief protection of a bond issue. In addition, covenants should limit the ratio of debts to assets, should prevent too liberal dividend policies, and should cause the maintenance of a proper balance between fixed and current assets. These standards apply alike to consolidated and simple companies. To the extent that they are abused, the bond issues depart from sound investment standards.

Bonds of Monopolies.—An exception to the requirement that bonds to be high grade be amply protected by liquidation values occurs in cases of monopoly. In these cases, fixed assets are given greater assurance of earning capacity in their present uses than they are in competitive cases. Since earnings are protected by monopolistic position, bonds can be issued in excess of liquidation values. Railroads and public utilities are examples of companies that can safely bond far in excess of scrap values of their properties. However, because earnings are publicly regulated to a limited rate of return on the value of their properties, the complete financial structures of these companies should conform more closely to asset valuations than need those of industrials.

Intermediate Securities.[4]—

There are two types of industrial securities where the purchasers can know exactly what they are getting. The first is the first mortgage bonds of a company whose property would sell at any time for an amount much in excess of the bond issue. The other is the common stock of a concern where the investor puts his money in with

[4] Investment Bankers Association of America, *Proceedings,* 1924, pp. 203-4.

the idea of getting unlimited rewards or taking a risk up to the amount of his investment. In one of these cases he is lending on ample security and gets a fairly low rate. In the other case he is backing a group of men who he thinks are going to be successful in whatever they undertake and wishes to associate himself with them and is willing to abide by the consequences.

Between these two classes of securities, however, is a very large field of debenture bonds, notes and preferred stocks; and it is in this class that a great many of the casualties occur and misunderstandings arise between the investor and the investment banker. Investment practice has set up restrictions of many sorts to give to these intermediate issues security which will appeal to the investor and protect him, but in the long run practically all of these securities come down to the plain facts of accepting a fixed rate of return and taking a certain amount of business risk. No matter how successful an enterprise may be, investors in such securities practically never share the success except in the way of improving security; but on the other hand if a company gets into difficulties, they will be in a very uncomfortable position and it is no consolation to them to know that the people who held the common stock of the company have suffered more severely than they. They consider that these common stock holders know their risks and accepted them; but they, as holders of the preferential securities, have expected protection which frequently proves to be lacking at a time of crisis.

It would probably be impossible to finance companies entirely on the basis of first mortgages and common stock. There are probably not enough investors of these two classes to provide the money that is needed, so appeal is made to the great middle class of investors who want a fair rate of return and a certain amount of security. This is one more feature of the business which puts a very large responsibility on the investment banker; because he not only has to assist the company in its financing, which frequently involves junior mortgage bonds, debenture bonds and preferred stocks, but he has to provide investments of this character for many of his customers who want a fairly good return and a minimum of risk. A great deal of the best banking thought has been given to the question of how restrictions are to be put on the intermediate securities. There is always a desire to make a debenture bond look as much as possible like a mortgage bond and to make a preferred stock look as much as possible like a bond. In this attempt it sometimes happens that companies are hampered unduly in their ability to do business and so, in

the long run, the investor loses rather than gains by having too many restrictions. Industrial reorganizations have demonstrated in some recent instances that restrictions of this kind were very serious contributing factors to the difficulties in which the companies found themselves.

Preferred Stock.—If preferred stock is to approach a pure investment basis, which is only one way of viewing it, it should be protected by liquidation values, by covenants to prevent incurrence of excessive debt, and by covenants to maintain proper liquidity of assets quite as much as should bonds. As it approaches a speculative ownership interest in the business, these protections may be relaxed. Since preferred stock is a hybrid, sometimes imitating bonds and sometimes imitating common stock, the decision as to relationships must rest on the type of investor or speculator to be reached and the dividend rate to be paid.

Common Stock.—Common stock, on the other hand, represents the residual equity in the business. The holders of the common stock exercise control of the corporate organization. They are primarily interested in the business as a going concern. Hence, shares of common stock are purchased and held, not as a protected investment commitment but as an equity in earning power. Here, asset protection is a secondary consideration.

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CHAPTER 14

FINANCIAL STRUCTURE

Reduction of Theory to Definite Standards.—In actual financing the theory of issuing securities must be reduced to definite figures. As has been noted, standards are relative to interest rates. The interest rates in the capital market vary from time to time. Rates are sometimes normal, sometimes "easy," and sometimes high. At any given time the investment bankers ascertain the prevailing yields of similarly situated issues and bring out new issues on a like basis. However, the corporation should not ordinarily issue bonds in a low rate market in excess of the amount that would leave normal relationships of interest to earnings if those bonds were later refunded at normal rates. Otherwise, subsequent refunding might cause a tremendous reduction in the value of the common stock. For example, assume a railroad corporation with average earnings of $5,000,000 and poor year earnings of $3,000,000 issues $100,000,000 of 3% bonds, and 500,000 shares of common stock. Later the bonds are refunded at 4½%. The earnings left for common stock will drop from $2,000,000 or $4 per share, to $500,000, or $1 per share. The shares will fall in the market to probably less than one-fourth of their former value. Their return has been decreased, and the risk factor incidental to fixed charges has been increased considerably. With these observations let us set up and apply some normal standards to public utilities, industrials, real estate companies, and banks.

Normal Standards.—No one would venture to set a rate of interest for bonds or a rate of dividends for preferred stock which would be valid for all years. Such rates are the result of the interplay of all those complex social, political, psychological, and economic factors which determine the supply of

capital available for investment and which determine the demand for that capital. The investment house merely prices issues to fit the current market. However, the financier and investor must look to more distant probabilities. Here past experience offers some jumping off points for future analysis. The accompanying tables give the yields of 120 bond issues contained in the Moody indexes and the yields of new bond and preferred stock issues by years.

Under normal conditions the bonds of a compact public utility company will sell to yield 5 to 5½% (1) if its interest charges are earned twice on the average, (2) if they are earned once in the poorest year, and (3) if its total debt is within 60% of its total assets conservatively valued. For a yield of 5 to 5½% interest should be earned more times on the average if the company's properties are scattered and the risks thereby increased. Roughly the same standards should hold for the railroads, though general investment literature permits average interest coverage to fall to one and three-fourths times. Bonds of an industrial company selling a staple product will sell on a 5 to 6% basis (1) provided interest charges are earned three to four times on the average, (2) provided they are earned once in the poorest year, and (3) provided the total bonded debt is covered by liquidation values. If there are sinking fund requirements, these should also be earned in the poorest year to prevent default.

Public utility preferred stock will normally sell to yield 6 to 7% (1) provided not more than one-half of the net earnings are taken by bond interest, (2) provided combined fixed charges and preferred dividends do not take more than 65% to 70% of the total average net earnings, and (3) provided that combined total debt and preferred stock do not exceed 80% of the corporation's assets. The preferred dividends should be earned except in a very abnormal year in a business cycle.

Since future poor years are difficult to estimate, some financial houses assume that bond interest should be covered if the company were to have a shrinkage in normal gross revenues of 20% and were to be unable to reduce operating expenses.

AVERAGE RAILROAD BOND YIELDS
(Source: Moody's *Industrials*)

Year	Aaa(10)	Aa(10)	A(10)	Baa(10)	Ave.(40)
1937	3.55	3.83	4.47	5.99	4.46
1936	3.47	3.65	4.28	5.55	4.24
1935	3.76	4.05	4.80	7.18	4.95
1934	4.08	4.47	4.96	6.33	4.96
1933	4.64	5.77	6.39	7.54	6.09
1932	5.32	6.55	8.20	10.35	7.60
1931	4.66	5.39	6.39	7.93	6.09
1930	4.45	4.69	4.99	5.72	4.96
1929	4.64	4.91	5.23	5.93	5.18
1928	4.40	4.63	4.94	5.42	4.85
1927	4.36	4.67	4.91	5.38	4.83
1926	4.57	4.97	5.16	5.84	5.13
1925	4.70	5.24	5.60	6.51	5.51
1924	4.78	5.44	6.13	7.25	5.90
1923	4.86	5.63	6.56	7.92	6.24
1922	4.74	5.63	6.09	7.10	5.89
1921	5.42	6.40	7.27	8.56	6.91
1920	5.64	6.44	7.73	8.68	7.12
1919	5.23	5.76	6.87	7.81	6.42

AVERAGE PUBLIC UTILITY BOND YIELDS
(Source: Moody's *Industrials*)

Year	Aaa(10)	Aa(10)	A(10)	Baa(10)	Ave.(40)
1937	3.21	3.45	3.98	5.09	3.93
1936	3.21	3.57	4.08	4.67	3.88
1935	3.52	4.02	4.61	5.56	4.43
1934	3.92	4.66	5.55	7.49	5.40
1933	4.29	5.02	6.32	9.38	6.25
1932	4.61	5.32	6.46	8.78	6.30
1931	4.36	4.68	5.12	6.90	5.27
1930	4.50	4.75	5.06	5.88	5.05
1929	4.67	4.91	5.22	5.76	5.14
1928	4.51	4.68	4.95	5.33	4.87
1927	4.59	4.76	5.02	5.46	4.96
1926	4.70	4.88	5.17	5.67	5.11
1925	4.82	5.03	5.42	5.91	5.29
1924	4.96	5.30	5.80	6.38	5.61
1923	5.14	5.51	5.97	6.75	5.84
1922	5.23	5.48	6.00	7.03	5.93
1921	6.34	6.55	7.38	8.40	7.17
1920	6.53	6.65	7.57	7.99	7.19
1919	5.68	5.83	6.38	6.93	6.21

AVERAGE INDUSTRIAL BOND YIELDS
(Source: Moody's *Industrials*)

Year	Aaa(10)	Aa(10)	A(10)	Baa(10)	Ave.(40)
1937	3.06	3.20	3.68	4.25	3.55
1936	3.03	3.18	3.71	4.07	3.50
1935	3.53	3.78	4.23	4.51	4.02
1934	4.02	4.20	4.72	5.15	4.52
1933	4.53	4.89	5.56	6.36	5.34
1932	5.09	6.06	6.94	8.76	6.71
1931	4.71	5.07	6.51	8.03	6.08
1930	4.69	4.86	5.35	6.09	5.25
1929	4.86	4.96	5.38	6.02	5.31
1928	4.73	4.82	5.12	5.71	5.10
1927	4.76	4.86	5.17	5.61	5.10
1926	4.93	5.06	5.40	6.11	5.37
1925	5.11	5.33	5.63	6.37	5.61
1924	5.28	5.57	5.85	6.87	5.90
1923	5.37	5.73	5.98	7.06	6.04
1922	5.35	5.66	6.01	7.12	6.04
1921	6.15	6.69	7.21	8.10	7.04
1920	6.19	6.69	6.94	7.94	6.94
1919	5.55	5.97	6.20	6.99	6.18

AVERAGE YIELDS ON NEWLY ISSUED SECURITIES
(Source: Moody's *Industrials*)

Year	Bonds				Preferred Stocks	
	Industrial	Railroad	Utility	All Corp.	Industrial	Utility
1937	3.70	3.49	3.55	....	4.77	4.66
1936	3.87	3.76	3.55	3.67	4.24	4.66
1935	4.19	4.25	3.84	3.98	5.45	4.57
1934	6.04	5.09	4.86	5.03	6.88	....
1933	5.56	5.24	4.98	5.23	7.23	....
1932	6.12	5.00	5.74	5.73	6.00	6.90
1931	5.26	4.73	4.71	4.80	6.27	5.21
1930	5.57	4.79	5.20	5.17	6.11	6.08
1929	5.76	5.02	5.21	5.34	6.09	6.11
1928	5.64	4.68	5.20	5.24	6.36	5.80
1927	5.62	4.94	5.26	5.34	6.51	6.09
1926	5.83	5.12	5.50	5.61	6.83	6.77
1925	6.05	5.45	5.61	5.75	6.85	6.85
1924	6.43	5.34	6.03	5.96	7.20	6.97
1923	6.37	5.38	5.98	6.09	7.21	6.85
1922	6.62	5.68	6.02	6.28	7.00	7.09
1921	7.57	6.64	7.31	7.23	7.93	7.54

This standard would be applied by taking 20% of gross revenues off the net in a normal period. Bond interest could not exceed the figure thus found available for interest. This assumption that operating expenses cannot be reduced is not so far fetched as would appear at first glance. Operating expenses of the companies decrease in depression periods, but the general public ill will that comes with bad business is harnessed by politicians in attacks on public utilities. These attacks frequently result in rate reductions. A rate reduction merely decreases gross revenues without decreasing service supplied. Hence, no important savings come with the reduction of gross. Since in a pinch the directors can pass the preferred dividend, preferred stocks are held to a less rigid standard than are bonds. Combined fixed charges and preferred dividends are required to meet the test of a 15% reduction in gross taken directly off net.

Industrial preferred stock will normally sell to yield 6% to 7% (1) if combined debt and preferred stock are kept well within the total assets of the corporation, (2) if combined fixed charges and preferred dividends are earned twice on the average, and (3) if the preferred dividends are earned except in the bottom year or two in a major business cycle.

Common stocks of industrials should normally sell at ten times per share earnings provided: (1) that bonds and preferred stock are in conservative ratio to the total financial structure, (2) that 60% of the earnings are paid out as dividends, and (3) that the company's earnings are likely to continue on a rather stable basis. If the company has great earnings growth prospects, purchasers will pay more in order to participate in the future growth of earnings. If the company faces a downward trend in earnings, less will be paid for the stock in terms of current earning power. Public utility and railroad stocks will be priced in the same way. The various groups of stocks will sell at different price earnings ratios because the earnings prospects of the groups are quite different. The above standard is merely a starting point from which individual differences are taken into account. Current earnings are only a limited part of the valuation basis. The investor is

really purchasing the future earnings, and the current earnings are important only to the extent that they throw light on what can be expected in the future. In financing the company, the promoter takes account of valuation standards, determines at what price he wants the stock to sell in the market, and then issues a sufficient number of shares so that per share earnings will cause the stock to sell at the desired price. He can forecast the market price much better in case he is promoting a consolidation than he can in case he is promoting a new company. The past experience and seasoned character of the constituent companies give a better guide in the consolidation case.

Public Utility.—Assuming the following figures, let us capitalize the following public utility. In order to put all tests into practice, let us determine the maximum amount of securities that can be issued in any one class, assuming in each case that the maximum amount of prior charge securities has been issued.

INCOME STATEMENT

	Average Year	Poor Year	Excellent Year
Gross revenues	$1,750,000	$1,400,000	$2,000,000
Operating expenses	1,050,000	1,000,000	1,100,000
Net earnings	$ 700,000	$ 400,000	$ 900,000

Total assets are $10,000,000 and current liabilities are $500,000.

Bonds.—Let us apply our standards. Combined debt should not exceed 60% of total assets. Allowing for $500,000 of current liabilities, this standard would leave $5,500,000 for the par value of 5½% bonds. Bond interest should be earned twice on the average. Interest charges could take one-half of the $700,000 of average earnings, or $350,000. Interest charges should be covered in the poorest year, or, in this case, should not exceed $400,000. (Had we estimated the poor year by the 20% gross off net formula, we should have had $350,000 (20% of $1,750,000 taken from $700,000) available in the poor year.) Here, the average relationship of interest to earnings restricts most; so since all standards must be met to have the bonds sell on a 5½% basis, we find ($350,000 ÷ .055) that the corporation could issue $6,363,600

in bonds without violating the requirement that the bond interest should be earned twice on the average and once in the poorest year. However, the *relationship to assets* standard permits the issue of only $5,500,000 of bonds. Conformance to this standard is necessary if the bonds are to sell on a 5½% basis. Consequently, the issue must be restricted to $5,500,000 with interest charges of $302,500.

Preferred Stock.—Total debt and preferred stock should not exceed 80% of the total assets. Since total assets are $10,000,000 and combined current liabilities and bonds are $6,000,000, this standard permits an issue of preferred stock of $2,000,000 par value. Combined interest and preferred dividends should not exceed 65% to 70% of the average net earnings. The author uses the 65% standard. This standard would permit the use of $455,000 (65% of $700,000) for bond interest and preferred dividends. Preferred dividends should be covered if the company were to sustain a shrinkage of net earnings equivalent to 15% of normal gross revenues. This standard would leave $437,500 ($700,000 minus 15% of $1,750,000) for combined bond interest and preferred dividends. Since this figure is lower than the $455,000 permitted by the average standard, it must be used. Bond interest requires $302,500 of the $437,500 available for combined charges. Hence, preferred stock can take only $135,000 for dividend requirements. Capitalizing the $135,000 at 6½%, we get a possible stock issue of $2,077,000. However, here again the relationship to assets is the restrictive factor, and we can issue only the $2,000,000 permitted by the asset standard. Dividend requirements will be $130,000.

Common Stock.—Common stock will be issued against the remaining assets. Public service commissions of about half of the states regulate the issue of securities by public service corporations. Since the companies are regulated on the theory that they shall exact no more than a fair rate of return on their investment in facilities for the public service, their securities are kept within the tangible asset limits. They theoretically have no excess earning power which can be capitalized as good

will. However, in lax jurisdictions such companies have frequently written up the value of their tangible assets and issued securities against the inflated book entries. The problem of issuing common stock is largely one of deciding on the number of shares. In the present case, the assets of the company leave a $2,000,000 equity for common stock. Normal earnings of $700,000 after deduction of $302,500 in bond interest and $130,000 in preferred dividends leave $267,500 available for common dividends. Assuming that the company has slight future growth prospects and that, consequently, the market would price the stock at ten times per share earnings, we are in a position to determine the number of shares to issue. If we want the stock to sell eventually at $50, we can divide the earnings figure by $5 (per share earnings). This would indicate that 53,500 shares of stock should be issued. We can make this no-par value stock with an aggregate stated value of $2,000,000; or we can make it of $40 ($39.25) par value per share; or we can make it $25 par value and have a paid-in surplus of $15 per share. As stated in the chapter on stock, par value means practically nothing from an economic standpoint. It only alters legal details in the issue of the stock. The final structure would thus be total assets $10,000,000; current liabilities, $500,000; bonds, $5,500,000; preferred stock, $2,000,000; and 53,500 shares of common stock with an aggregate equity of $2,000,000.

The student is perhaps wondering why the corporation will not have $10 per share more assets if stock with a stated value of $40 will sell at $50. The answer is two-fold. First, the stock is originally issued to the persons who organize the enterprise. They reap the profits of being able to put in $40 and later dispose of their interest on a $50 basis. This is particularly true in cases of consolidation in which the securities in the new company are exchanged for securities in the old constituent companies. Second, the company is not born a full-fledged success. The initial risks are such that the stock will bring only $40. After the earning power has been demonstrated, the stock rises in value; but it is too late for the corporation itself to realize that value.

Railroads.—The era of railroad promotion is over. A small amount of mileage is still being built in adapting systems to their territories. For the most part, railroad finance consists of refunding, recapitalization, reorganization, and consolidation problems. These can be discussed better under those subjects than in the present chapter.

Industrial.—Let us apply industrial standards in the same way that we applied the public utility standards. Assume a corporation with total assets of $150,000, liquidation value of assets $50,000, average net earnings of $22,000, poorest year net of $2,000, second poorest year net of $5,000, and current liabilities of $5,000.

Bonds.—Total debt should not exceed liquidation values for bonds normally to sell on a 6% basis. Liquidation value minus current liabilities would permit an issue of $45,000 ($50,000 minus $5,000) of bonds. A *three-times-fixed-charges-earned* standard would permit interest charges of more than $7,000 on the average earnings basis (⅓ of $22,000). However, the requirement that charges be earned at least once in the poorest year, would limit interest charges to $2,000. At 6% only $33,000 of bonds could be issued $2,000 ÷ .06. Here, the poor year earnings limit the amount of bonds that can be issued. This is usually the case with industrial corporations. However, steel companies owning their own coal and ore reserves, oil companies, and similar enterprises can issue bonds when interest charges will not be met by earnings in the poorest year. This exception is possible because their operations convert their natural resource fixed assets into cash. The cash can be used to pay charges even though they are operating at a bookkeeping loss. Likewise, a merchandising company can sell out inventories and use the proceeds to pay interest on bonds. This process will deplete the stock equity in the business, but it will prevent default and foreclosure. Nevertheless, best practice would hold the debts of these companies within the conservative limits of poor year experience. In the present example, $33,000 is an amply large funded debt.

Preferred Stock.—If preferred stock were to sell on a low yield basis like a bond, it would have to be covered by liquidation values. However, it normally takes a going-concern risk in the success of the enterprise and receives a higher rate of dividend to compensate for the additional risk. If the issue is to sell on a *7%* basis, it must be kept well within the asset coverage of the company or in this case within the $112,000 remaining after bonds and current liabilities have been deducted from total assets of $150,000. Combined interest and preferred dividends should be earned at least twice on the average. One half of average earnings or $11,000 is available to cover bond interest of $1,980, and preferred dividends. This standard would leave $9,020 for preferred dividends. However, the preferred stockholder must have assurance of a relatively steady income if he is to be contented with a *7%* return. He will take a chance on the management's foreseeing a depression and setting aside funds to pay his dividend in the poorest year. If the management fails to do so, the dividend will be passed, but the company will not be jeopardized. On the other hand, the purchaser does not care to take a low return and have his dividend passed too often. Consequently, he will feel that the dividend should be earned currently except in the poorest year of the business cycle. If this standard is applied, combined interest and dividend charges should not exceed the second poorest year earnings, or $5,000. Since interest charges are $1,980, preferred dividends will not exceed $3,020. At *7%*, $43,000 of preferred stock ($3,020 ÷ .07) can be issued.

Common Stock.—The remaining equity in the assets will be offset by common stock. This equity will be $69,000 ($150,000 minus $5,000 of current liabilities, $33,000 of bonds, and $43,000 of preferred stock). The average earnings available for common stock are $17,010. Assuming that the company's future prospects are for steady sales and profits, the common would sell in the market at ten times per share earnings. If we wanted the stock to sell at $50 per share, we would divide average earnings of $17,010 by $5 to obtain the number of shares to be issued. This would give 3,402 shares.

These could be made no-par value shares, or they could be made of some par value so that the aggregate value would not exceed the stated value of the assets remaining to the stock ($69,000). As previously stated, the stock would first be issued to promoters or a promotion syndicate at paid-in value; later as earning power was proved, it would sell on the basis indicated.

The structure would then be: total assets $150,000; current liabilities, $5,000; bonds, $33,000; preferred stock, $43,000; common stock, evidenced by 3,402 shares carried on the books at $69,000 of stated value or of par value and surplus. The stated value or par value might readily be set at $1 per share and the balance carried as surplus. The designation means little except in connection with dividend policies and recapitalization schemes. Even as this is written, the stockholders of the Duquesne Natural Gas Company (Pittsburgh, Pennsylvania) are meeting to change 108,750 no-par shares into shares of one cent par value. This change will presumably reduce taxes.

Conservative Financing.—The foregoing financial structures indicate the maximum amounts of bonds and preferred stock that could be safely issued according to our standards. It does not follow that the promoter should issue these amounts. The safest financial structure is one composed entirely of common stock. In most cases new companies should issue only common stock. After earning power has been demonstrated, expansion can be financed by the sale of bonds or preferred stock. The structure can then be balanced up for purposes of trading on the equity. However, it is exceedingly dangerous to issue bonds initially unless earnings are clearly assured.

Apartment House.—Assume a value of $1,500,000, average net earnings of $120,000, and poor year net of $40,000. It is desirable to limit loans on improved urban real property to from 50% to 60% of the value of the property. This provides a margin for shrinkage in case of forced liquidation. Bonds here should be within the $750,000 to $900,000 limit. Interest should be earned more than twice on the average and should

be earned in the poorest year. Here, one-half average earnings is $60,000; whereas poor year net is $40,000. Thus the $40,000 figure controls. This would permit $660,000 of 6% bonds. The balance of the structure should be composed of common stock. Preferred stock could be issued, but usually these structures are simple.

Banks.—Before the bank holiday of 1933, bank capital liability structures were simple. They consisted only of common stock. As an emergency method of strengthening the banks, provision was made for the issue of preferred stock by national banks and for the issue of capital notes by some state banks. Nevertheless, bank structures are normally one class of stock structures. The bank trades on the equity more than any other type of institution and with a more dangerous type of borrowed money. Borrowed funds are evidenced by demand and time deposits. While these are stable in the aggregate, they tend to prove embarrassing during panic periods. Whether we have eliminated the possibilities of bank runs by deposit insurance schemes, only the future can tell. Regardless of runs, however, bank deposits are drawn down during depressions. The risks of these withdrawals fall heavily upon the common stockholder of the bank. Since deposits may be four to ten or more times the capital stock equity in the bank, depending on location and management of the bank, there is sufficient leverage in bank shares without permitting the issue of bonds or capital notes. The structure is rightly a common stock structure.

Banks must be chartered by the state in which they operate or by the federal government. These authorities regulate the payment for bank shares and require that they be paid for in cash. In the case of national banks it is customary to require that stockholders pay in a surplus equal to 20% of the par value of their shares. Thus a $100 share would be sold to the stockholder at $120. In the case of banks with double or triple liability attaching to their shares, it is customary for the stockholders to keep the par value of their shares at a minimum and pay in most of the capital funds as surplus. Thus in

Colorado, where state bank shares carry triple liability, a bank desiring capital funds of $250,000 might well sell $50,000 of $100 par value shares at $500 per share. In this way the shareholder's liability would be held down to the point at which, if the bank failed, the banking authorities could collect only an additional $100,000 from the shareholders, instead of $500,000 that the shareholders would have been liable for if the bank had issued $250,000 par value of stock.

The state and federal authorities will ordinarily have power to refuse a charter if they find that the community already has sufficient banking facilities. The statutes under which the bank is organized usually specify the minimum capital stock of a bank for a community of given size. The promoters can control the capitalization only to the extent of exceeding minimum requirements and in distributing capital funds above the minimum between par value and paid-in surplus. After the bank is organized, they can control the expansion of deposits (the borrowed capital element of their structure). Nevertheless, in some states a maximum limit of deposits to capital funds (offset by capital stock, surplus, and undivided profits reserve accounts) is specified by statute. Such limits hold the ratio of owned to borrowed capital within reasonable limits.

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CHAPTER 15

RECAPITALIZATION

Capital Reductions.—In preceding chapters allusion has been made to the practice of reducing the stated value of the capital stock of a corporation in order to eliminate a balance sheet deficit. This practice goes under the name "capital reductions." The mechanics of the process are simple. The directors call a special meeting of the stockholders to vote on an amendment to the corporation's charter. The amendment provides that the stated value of the capital stock shall be reduced to a specified figure. After the amendment has been ratified, it is filed with the secretary of state. Then the old certificates of stock are called in, and new ones issued for them. In most cases the number of shares outstanding is not changed; the stated value of each share is merely reduced. In such cases the stockholders' equity is not affected. The assets are the same. They have the same proportionate interest in assets and earnings that they had before. The only difference is a change in the bookkeeping description of their interest and, possibly, of the assets. However, in some cases the number of shares as well as the stated value of each share is decreased. For example, in 1932 the Electric Bond and Share Company reduced the stated value of its stock from $10 no-par to $5 par value per share and issued one share of the new stock for each three shares of the old. Nevertheless, this change had no effect on the position of stockholders since each share of the new stock represented the same proportionate interest in the assets as three of the old shares did. The effect of the reduction in number of shares, of course, was to raise the market price of a new share so that it approximated the price of three of the old shares.

The capital reduction is sometimes used to wipe out an operating deficit. In other cases it is used to permit a reduction in the balance sheet value of fixed assets or to adjust for

abandonments. When the reduction is voted, the capital stock account is reduced (debited) by the amount of the reduction, and the capital surplus account is credited with the amount of the reduction in capital stock. The deficit, reductions in asset valuations, and abandoned properties are written off by decreasing (debiting) the capital surplus account. The announcement of the Continental Can Company reduction illustrates:[1]

The stockholders on November 22 voted to change all of the company's previously authorized shares of stock without par value, issued and unissued, into the same number of shares with a par value of $20 per share, and to reduce the amount of the capital of the company to $34,666,900.

As there are 1,733,345 shares outstanding this will cause a reduction of the capital from $63,249,903 to $34,666,900 with, however, a resulting capital surplus, as of September 30, 1932, of $28,583,003.

The following summarizes the capital and surplus arising as above, after giving effect to certain charges which it is proposed to make thereagainst:

Capital surplus	$28,583,003
Charges Against Capital Surplus—	
Real estate, buildings, machinery, etc. [The company has always made substantial provision for depreciation, as is evidenced by the reserve of $14,932,539 for depreciation set up on its books as of September 30, 1932. Due to present-day values, it is proposed to place an additional sum in this reserve fund to bring the company's plants and machinery down to current sound replacement values.] Amount required	6,000,000
Employees' stock cancellations. The company's stock subscription plans as previously approved by the stockholders provide that employees may cancel their subscriptions if they so desire, prior to payment in full. Subscriptions have been canceled amounting to 31,201 shares, which are now held in the treasury of the company, and to adjust these shares to $20 par value, it is proposed to charge against capital surplus the sum of	1,004,253
Employees' stock adjustment. At the last annual meeting held March 8, 1932, the stockholders authorized a reduction in the subscription price under the company's employees' stock subscription plans. To provide for this reduction it is proposed to charge against capital surplus the sum of	560,210
Net capital surplus after above charges as of Sept. 30, 1932	$21,018,540
Capital stock issued: 1,733,345 shares ($20 par value)	34,666,900
Earned surplus	18,727,545
Total capital and surplus	$74,412,985

[1] *Commercial and Financial Chronicle,* November 26, 1932, p. 3696.

Stock Dividends and Split-Ups.—The stock dividend and split-up are discussed in detail in other chapters. However, it is well to note that these devices are really recapitalization devices. The effect of the stock dividend is to increase the aggregate stated capital of the company while leaving the stated value of each share the same. The split-up leaves the aggregate stated value the same but decreases the stated value of each share. Both methods increase the number of shares outstanding and consequently decrease the equity of a single share in the assets and earnings of the corporation. In this respect the stock dividend and split-up are diametrically opposed to the type of recapitalization that reduces the number of shares outstanding. The former devices seek to reduce the per share price in the market; the latter to raise it.

Elimination of Preferred Dividend Accumulations.—During periods of depression many corporations are forced to suspend dividends on their cumulative preferred stocks. If the depression is prolonged, these accumulations of unpaid dividends become very large, and if met in cash, they might postpone dividends on common stock for many years. On the other hand, directors can continue to pass the preferred dividends or to make no attempt to pay off the accumulations. The common stockholder is handicapped by the accumulations ahead of his stock; the preferred stockholder is handicapped by lack of control. Under these circumstances the management tries to drive a bargain with the preferred stockholders whereby they will fund their accumulated dividends by taking additional stock or waive them in return for additional privileges. These privileges frequently take the form of a conversion or participating privilege or a higher rate of dividends. The agreement may require only that common stockholders provide cash contributions to working capital. If the dividends have not yet been resumed, the plan usually contemplates the immediate resumption of dividends on preferred stock. Ordinarily the prospect of immediate returns will induce the preferred stockholder to accept the plan. Resumption of dividends will cause the stock to rise in the market. Hence,

the new shares can be sold in lieu of a cash dividend, and the old shares will also be more valuable in the market. Market factors favor any reasonable plan of funding the accumulated dividends.

Creation of a Prior Preferred Stock.—However, in case pressure is needed against a minority group, it can be applied by placing a prior preferred issue ahead of the existing issue. This is common practice. Many preferred stock contracts permit a stated percentage of the stock to authorize a prior lien. The stockholders' meeting which ratifies the plan authorizes the creation of a prior preferred stock. Then the prior preferred stock in the amount of the old preferred plus the accumulations, or prior preferred plus common for accumulational, is offered to the old preferred stockholders in exchange for their shares. The old shareholders are invited to deposit their shares under the plan; and if a sufficient number of shares is deposited to make the plan workable, it is declared operative. Once the old shares have been surrendered, the accumulated dividend claims perish with them. By paying dividends on the new prior preferred and passing them on the old preferred, the directors hasten the exchange. The Republic Steel Corporation plan illustrates the prior preferred technique.

Republic Steel Prior Lien Preferred.—The original Republic Steel Corporation 6 per cent cumulative convertible preferred stock provided that, "No stock may be created having priority over this issue, except with two-thirds consent of serial preferred." However, in 1935, a new 6% cumulative convertible prior preference stock was authorized by the vote of two-thirds of the old stock. In September, 1935, the corporation offered to exchange one-half share of the new prior preferred stock and two shares of common for each share of the old preferred stock then outstanding. Initial dividends were paid on the new stock on January 2, 1936, and were continued regularly thereafter. None was paid on the old preferred until after the exchange offer was terminated on December 7, 1936. Holders of $47,601,100 par value of the

old preferred had exchanged their holdings when the offer was terminated.

Conversion Privileges.—During the F. D. Roosevelt administration the fears of inflation were so marked that conversion and participating provisions assumed strategic importance in bargaining. Preferred stockholders were frequently induced to surrender part of their claims to unpaid dividend accumulations for a conversion privilege which would protect them against inflation. The following plan of the Chicago Pneumatic Tool Company represents a comprehensive plan in which a bad working capital position was bolstered and preferred dividend accumulations wiped out by a recapitalization that made little concession to preferred stockholders.

Chicago Pneumatic Tool Company Plan.—The following excerpt is from a letter to the stockholders, dated April 20, 1937.

To the Stockholders:

For some time past your directors have been considering a readjustment of the debt and capital structure of your Company, having in mind particularly the fact that there is outstanding over $2,000,000 of 5½% funded debt maturing at the relatively early date of October 1, 1942 and approximately $842,000 of notes payable. Further, the accumulations of dividends on the outstanding 181,135 shares of $3.50 Convertible Preference Stock amounted on April 1, 1937 to $17.50 per share, or a total of $3,169,862.50, after the payment of a dividend of 87½c per share on that date and the possibility of paying these accumulations under the present capital structure is obviously remote.

As indicated in the annual report of the Company mailed to stockholders on March 8, 1937, earnings for the year 1936 showed a good increase over those of previous years. However, with rising prices of raw materials, higher wage levels, and an expanding volume of business, the Company requires a substantial amount of working capital, and the restricted cash position of the Company has made it necessary during recent years to borrow considerable amounts from banks. For these reasons, and in view of the relatively early debt maturity above mentioned and the tax on undistributed profits which penalizes the accumulation of working capital out of earnings, it would not be wise corporate policy to pay any substantial part of the

accumulated dividends on the $3.50 Convertible Preference Stock at this time.

Under these circumstances your directors have unanimously voted to submit for the approval of stockholders a plan of recapitalization which contemplates:

(1) The reclassification of each share of the present outstanding $3.50 Convertible Preference Stock and accrued dividends into

(a) one share of new $3 Convertible Preference Stock (convertible into 1⅓ shares of Common Stock) with dividends cumulative from April 1, 1937, and

(b) ¾ of a share of Common Stock.

(2) The increase of the authorized Common Stock of the Company from 500,000 shares to 750,000 shares.

(3) The authorization of 100,000 shares of Prior Preferred Stock, carrying a dividend rate of $2.50 per annum, each share of which will be convertible into 1⅔ shares of Common Stock. It is planned to sell 70,000 shares of the Prior Preferred Stock if and as soon as market conditions permit to provide funds to retire the outstanding debentures and substantially all of the bank debt and to provide working capital.

Details of the Plan

It is proposed that the plan of recapitalization be effected by amendments to the Certificate of Incorporation of the Company which will result in substantially the following:

Prior Preferred Stock: There will be authorized a new class of stock to be entitled "Prior Preferred Stock" limited to 100,000 shares, without nominal or par value.

The Prior Preferred Stock will be entitled to priority over the new $3 Convertible Preference Stock as to dividends and assets, will entitle the holders thereof to receive cumulative dividends at the rate of $2.50 per share per annum and will be convertible, at the option of the holder, into 1⅔ shares of Common Stock at any time prior to redemption or the liquidation of the Company. Such Stock will be subject to redemption at $55 per share and accrued dividends, if redeemed on or before October 1, 1947 and at $52.50 and accrued dividends if redeemed thereafter. The Prior Preferred Stock will be subject to purchase or redemption by operation of a sinking fund which will provide for the application to such purposes of up to $50,000 per year out of the Company's consolidated net earnings, after dividends on both classes of preferred stock; will be entitled to $55

per share and accrued dividends on the voluntary liquidation of the Company on or before October 1, 1947 and to $52.50 per share on such liquidation thereafter; and will be entitled to $50 per share and accrued dividends on involuntary liquidation of the Company at any time. The holders of the Prior Preferred Stock will be entitled to elect a majority of the Board in the case of certain dividend defaults and to vote on the specific matters provided in the amendment to the Certificate of Incorporation, or as specified by law. Otherwise all voting rights are vested in the $3 Convertible Preference Stock and the Common Stock.

(In connection with the above mentioned preferences of the Prior Preferred Stock, it should be noted that the Board of Directors contemplates the issuance of 70,000 shares of such Prior Preferred Stock primarily to effect the retirement of the funded debt and all or substantially all of the short term debt, thereby reducing interest and sinking fund obligations now ahead of the Convertible Preference Stock.)

$3 CONVERTIBLE PREFERENCE STOCK: The authorized amount of $3.50 Convertible Preference Stock will be decreased from 188,000 shares to 181,135 shares by the retirement of 6,865 shares now held in the Company's treasury and each of the 181,135 shares of $3.50 Convertible Preference Stock without par value now outstanding, upon which unpaid dividends of $17.50 per share have accrued to April 1, 1937, will be reclassified into and upon the filing of the amendment to the Certificate of Incorporation, will automatically become, one share of $3 Convertible Preference Stock, without par value (convertible into 1⅓ shares of Common Stock at any time prior to redemption at the option of the holder) and ¾ of a share of Common Stock. Dividends on the new $3 Convertible Preference Stock will be cumulative from April 1, 1937 and will be payable only out of earnings accumulated since January 1, 1937, after provision for dividends on any Prior Preferred Stock outstanding. (Such earnings will be sufficient, in the expectation of your directors, to commence the payment of dividends on the $3 Convertible Preference Stock on July 1, 1937.) The new $3 Convertible Preference Stock will have full voting rights, share for share, with the Common Stock and if no Prior Preferred Stock is outstanding, will have the right to elect a majority of the Board in case of certain dividend defaults. The new $3 Convertible Preference Stock will be subject to redemption at $55 per share and will be entitled to the same amount in the case of a voluntary liquidation of the Company and $50 in case of an

involuntary liquidation, in each case together with accrued dividends, after provision for any Prior Preferred Stock outstanding.

Common Stock: The authorized amount of Common Stock will be increased from 500,000 shares to 750,000 shares. Of this 750,000 shares, 199,469 shares are now outstanding, 135,851¼ shares would be issuable to the holders of the new $3 Convertible Preference Stock under the plan of recapitalization, 241,513⅓ shares would be reserved for the conversion of the said Preference Stock, and 116,666⅔ shares would be reserved for the conversion of 70,000 shares of the Prior Preferred Stock in the event of their issue. Thus if the plan is carried out, 70,000 shares of the Prior Preferred Stock issued and all conversion rights exercised, your Company would have outstanding only one class of stock consisting of 693,500¼ shares of Common Stock.

(For further details of the rights and privileges of the respective classes of stock, see the attached copy of the proposed amendments to Article IV and Article VII of the Certificate of Incorporation of the Company.)

Interest on Cumulative Income Bonds.—Interest accumulations on cumulative income bonds are funded in the same way as are accumulations on preferred stock.

Extension of Bonds.—Each period of depression catches many corporations with maturing bond issues. In these periods the security markets are in such condition that refunding operations are not possible. Hence, the corporation must make some arrangement with the bondholders or default. At such times a default will not be of advantage to the bondholders and will ordinarily depress the value of their holdings in the market. Consequently, they can often be induced to accept cash for a part of their bond claim and new bonds for the balance. In some cases the entire issue may be extended at the same or a slightly higher interest rate. The plan set forth in the accompanying announcement of the New York, Chicago, and St. Louis Railroad Company is typical of the plans used in the 1929-1936 depression.

Waiver of Covenants.—During a period of severe depression a corporation's earnings may not permit it to meet sinking

The New York, Chicago and St. Louis Railroad Company

TO HOLDERS OF THE NEW YORK, CHICAGO AND ST LOUIS RAILROAD COMPANY'S THREE-YEAR 6% GOLD NOTES DUE OCTOBER 1, 1932:

On October 1, 1932, there will fall due the $20,000,000 principal amount of this Company's Three-Year 6% Gold Notes. When these Notes were originally issued it was anticipated that they would be refunded through the customary channels, but because of the decline in the market values of railroad securities and the present low earnings of the Company such refunding is not possible at the present time, and probably will not be possible until conditions materially improve. The Company is without available funds to meet this maturity, and also without available funds to meet interest payments of $600,000 due on these Notes on October 1.

Confronted with this situation, and in order to avoid the consequences of a default, the Company made application to the Reconstruction Finance Corporation for a loan which would enable it to meet its obligations in full, including certain taxes and interest payments due on October 1, 1932. This the Reconstruction Finance Corporation has declared itself unable to do. However, it has agreed, with the approval of the Interstate Commerce Commission, to loan the Company the sum of $6,800,000, *but it imposed the condition that before any advance upon this loan is made, the Company deposit with the Reconstruction Finance Corporation evidence satisfactory to that Corporation that the holders of substantially all of the Three-Year 6% Gold Notes will extend 75% of the principal thereof for a term of not less than three years.* Under this arrangement $5,000,000 of the $6,800,000 loan would become available for paying the balance of 25% of the principal amount of the Notes in cash, $600,000 would be used in paying in full the interest due on the Notes on October 1, 1932, and the remaining $1,200,000 would be applied in paying other interest due on October 1, 1932 and some $16,865 of taxes. As the Company has no other funds available for the purpose, it will be unable to pay the interest and principal due on October 1 unless the condition imposed by the Reconstruction Finance Corporation is satisfied and the loan tendered by it obtained.

The Board of Directors and the management of the Company believe there can be no doubt that the proposed arrangement is to the best interests of the Noteholders and of the Company itself, and in order to carry it into effect have prepared and hereby submit to the Noteholders the following Plan:

PLAN.

The Company upon consummation of the Plan will pay to each holder of its Three-Year 6% Gold Notes due October 1, 1932, an amount in cash equal to twenty-five per cent. of the principal amount of such Notes, and the full interest instalment due October 1, 1932, and will issue to the [illegible] 1932. All of the foregoing, however, is to be subject to the conditions that on or before October 1, 1932, or such further date as may be fixed by the Company, substantially all of the Noteholders indicate their approval of and agreement to the Plan by depositing their Notes with Guaranty Trust Company of New York, Depositary, under the Deposit Agreement, and that the Plan is declared operative. The Company is to have the sole right, in its discretion, to declare whether or not the Plan is to be operative, but it will not declare the Plan operative unless substantially all of the Notes have been deposited and it has been advised by the Reconstruction Finance Corporation that its condition has been thus satisfied and that it will complete its loan to the Company. The Company shall have the sole right to determine any questions of interpretation arising under the Plan.

Upon the deposit of Notes the Noteholders will be given Deposit Receipts in transferable form. Application will be made to list these Deposit Receipts on the New York Stock Exchange.

All expenses in connection with the Plan and Deposit Agreement will be borne by the Company.

Noteholders desiring to accept this plan of payment should deposit their Notes for this purpose with the Depositary, Guaranty Trust Company of New York, 140 Broadway, New York, N. Y., at the earliest date possible. For their convenience a form of letter to be used in depositing their Notes may be obtained from the Depositary.

The Board of Directors of the Company wishes to emphasize that the promptest action is necessary on the part of all the Noteholders in order to obtain the loan necessary to make the contemplated cash payment, and to avoid the consequences of a default.

By Order of the Board of Directors.

W. L. ROSS,
President.

Dated at Cleveland, Ohio,
September 13, 1932.

Inquiries and communications should be addressed to Geo. S. Ross, Secretary, The New York, Chicago and St. Louis Railroad Company, Terminal Tower, Cleveland, Ohio.

Figure 15. Announcement of the New York, Chicago, and St. Louis Railroad Company Bond Extension Plan

fund, maintenance, or other requirements in its bond indentures. Failure to meet these ordinarily constitutes an act of default and may permit acceleration of the maturity of the debt. To avoid this contingency, the corporation may present the facts to the bondholders and ask them to waive the restrictive provisions for the period of the emergency. Rather than face the destruction of market values of securities that would come with receivership or bankruptcy, the bondholders will frequently assent to adjustments. Assent is secured by deposit of the bonds under the plan. When the amount necessary to modify the covenants is deposited, the plan is declared operative; the covenants are modified; and the bonds are returned.

Montana Cities Gas Co.—*Change in Sinking Fund.*—The holders of the 1st mtge. 7% sinking fund gold bonds, series A, due Nov. 1, 1937, are asked to consent to a change in the sinking fund requirements under the mortgage so that the company shall be obligated to retire bonds through the operation of the fixed sinking fund only in a principal amount equal to its net earnings. At present company is obligated through the operation of a fixed sinking fund to retire bonds at the following rate

$13,000 per month until Oct. 1932,
$14,000 per month from Nov. 1932 to Oct. 1933,
$15,000 per month from Nov. 1933 to Oct. 1934,
$16,000 per month from Nov. 1934 to Oct. 1935,
$17,000 per month from Nov. 1935 to Oct. 1936,
$18,000 per month from Nov. 1936 to Sept. 1937.

Bondholders consenting to the plan are asked to deposit their bonds with Manufacturers Trust Co., 149 Broadway, N. Y. City.[2]

Reincorporation in Another State.—Not infrequently a corporation desires to change its state of incorporation. It does this to avoid excessive taxation or to secure the advantages of more liberal corporation laws. In such cases it is customary to form a corporation in the new state. The old corporation then sells its properties to the new corporation in exchange for the new corporation's stock. The old corporation then dissolves and delivers the stock of the new corporation to

[2] *Commercial and Financial Chronicle,* September 10, 1932, p. 1824.

its stockholders as a liquidating dividend. The practice is illustrated by the Manhattan Electrical Supply Company case.

MANHATTAN ELECTRICAL SUPPLY CO., INC.—*Reorganization Plan Approved.*—The stockholders on March 25 approved a plan of reorganization outlined as follows:

1. The present company having transferred its electrical supply jobbing business to a new subsidiary subject, insofar as practicable, to the liabilities of that business, will have assets consisting of the stocks of subsidiary companies, cash and certain credits.
2. A new corporation will be formed in Delaware under the name American Machine and Metals, Inc., with an authorized capital stock of 500,000 shares of common stock without par value.
3. The present company will sell all of its property, subject to its liabilities, to the new Delaware corporation solely in exchange for a number of shares of the latter's stock equal to the number of shares of the present company's stock outstanding at the time of sale. The sale will also be made subject to payment from the property transferred of all taxes and expenses of the present company in connection with its dissolution or the expiration of its corporate life.
4. Thereafter the present company will be brought to an end either by voluntary dissolution as provided in the Massachusetts statute, or, if practicable, by amendment of its charter to provide that its corporate existence shall end at the close of business June 30, 1930.
5. Upon its dissolution or the expiration of its corporate life, the present company will divide its distributable assets pro rata among its stockholders, which will mean that each stockholder of the present company will receive one share of stock of the new Delaware corporation for each share of the present company that he then holds.[3]

Analysis of Recapitalization.—The technique of analyzing a recapitalization is to take the net earnings before bond interest and deduct the bond interest and preferred dividends of the new structure from that figure. Any balance will belong to the new common. The earnings per share of common can be found by dividing the balance of earnings for common by the number of shares of common stock. For example, let us analyze the Worthington Pump and Machinery Corporation plan of recapitalization.

[3] *Commercial and Financial Chronicle,* April 5, 1930, p. 2403.

Worthington Pump and Machinery Corporation Analysis.—As of December 31, 1936, the outstanding capitalization of the Worthington Pump and Machinery Corporation consisted of 53,728 shares of class A 7% $100 par preferred stock, 91,333 shares of class B 6% $100 par preferred stock, and 129,918 shares of $100 par common stock. Preferred dividends were in arrears to the extent of $35 per share of class A preferred and $30 per share of class B preferred. Total arrears were $4,620,502. On May 18, 1937, stockholders approved a plan of recapitalization to eliminate all arrears. Under the plan, holders of 7% class A preferred received in respect of each share and $35 accumulated unpaid dividends one-half share of 4½% convertible prior preferred stock, one-half share of 4½% non-convertible prior preferred stock, and one and one-fifth shares of common stock. Holders of 6% class B preferred received one-half share of 4½% convertible prior preferred stock, one-half share of 4½% non-convertible prior preferred stock, and three-quarters of a share of common stock. Common stockholders retained their shares. Upon completion of the exchange, the capitalization would consist of 72,532 shares of prior preferred presently convertible into common at the rate of one share of preferred for two shares of common, 72,532 shares of 4½% non-convertible prior preferred, and 264,392 shares of common. A restatement of past results in terms of the new capitalization is as follows:

Book value of the new common is determined as follows:

Stock Equity December 31, 1936		
Capital stock	$19,794,568	
Earned surplus	724,964	
Capital surplus	325,036	
Total stock equity		$20,844,568
Deduct		
New convertible preferred par	$ 7,253,200	
New non-convertible preferred	7,253,200	14,506,400
Balance for common stock		$ 6,338,168
Number of common shares		264,392
Book value per share		$23

Per share earnings are determined as follows:

Year	Net Income	New Pfd. Div. Requirements	Balance for Common	Per Share Earnings
1928	$ 974,076	$652,788	$ 321,288	1.22
1929	2,529,356	652,788	1,876,568	7.10
1930	2,056,093	652,788	1,403,305	5.31
1932	d1,668,287	652,788	d2,321,075	d8.78
1935	d95,387	652,788	d748,175	d2.83
1936	248,497	652,788	d404,291	d1.53
1937 (9 mo.)	1,402,076	652,788	750,517	2.84

d = deficit.

Analysis of Reorganized Structures.—Recapitalizations which result from involuntary reorganizations raise the same problems of analysis that voluntary recapitalizations raise. However, interest charges are usually a very prominent factor among companies which are forced to reorganize. Although adjustments have been made in the burden of interest charges, the technique of analysis will not change from that stated above. However, the analysis will involve one more step. The analyst will deduct the new interest charges from net earnings before he proceeds to analyze the effects of the plan on the new amounts of outstanding stock.

References

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CHAPTER 16

EXPANSION

Problem.—Industries in the United States have not reached the state of maturity that exists in some of the older countries of the world. Our undeveloped natural resources and growing population give expansion prospects that no longer exist in some sections of the world. Businesses can expand either by growth of the single enterprise or by consolidation of a number of establishments. Consolidations by sale of total assets, by merger, by amalgamation, by lease, and by stock control are treated in detail in subsequent chapters. This chapter is confined to problems connected with the securing of additional funds by an existing establishment. For convenience, the securing of funds with which to rehabilitate properties is also treated here because the same principles apply in large measure to both situations.

Desirability of Expansion.—The first problem that the managers of a concern face is the desirability of making the expansion. Decision of this point rests upon an analysis of future sales, prices, and costs. Very frequently the student approaches this problem in terms of averages. This is not correct analysis. Increment cost and increment profit analyses are the proper approach. Suppose the following data:

	Present	Estimated Future
Sales in units	1,000,000	1,500,000
Price per unit	$1.00	$.80
Cost per unit	$.80	$.65
Profit per unit	$.20	$.15
Total operating assets	$1,000,000	$1,500,000
Rate earned on operating assets	20%	15%
Total costs	$800,000	$975,000
Total profits	$200,000	$225,000

New funds can be borrowed at 6%. Will it pay to expand? Increased supply of the product will cause prices to fall, but

decreasing costs on the enlarged volume will cut costs to a point at which the per unit profit will amount to 15 cents. The new average return on capital will be 15%, but this rate is above prevailing capital costs. The student frequently jumps at the conclusion that the expansion is desirable because the rate earned on total assets is still above normal. This reasoning is defective. The question the business man faces is, "Have net profits been increased by the expansion?" Here they have not. The business has invested $500,000 in additional assets to obtain an added return of $25,000. This is a return of 5% on the additional capital. The cash cost of the new funds if borrowed is 6%. In addition to the actual interest cost, the stockholder must assume the risks of protecting the bondholder. Obviously, the management is not justified in expanding under the conditions of the stated problem.

The approach illustrated above is known as increment cost and increment profit analysis. It proceeds on the basis of analyzing the effects of a change in policy: the increases in costs and the increases in profits. The increment costs in the above examples are $175,000; the increment profits, $25,000.

Source of Funds.—After the management has decided to expand, it must determine the best channel through which to obtain funds. As in the original promotion, the sources will include the sale of stock and bonds, and borrowing for short periods. In addition to these sources, the going concern can finance expansion by reinvesting earnings. Whether the managers choose one source or a combination of sources will depend on the individual circumstances of the firm and the relative costs and risks of using particular sources. The financial structure must be kept balanced at all times.

Reinvested Earnings.—A large portion of the industrial growth of the United States has been financed by reinvested earnings. Those industries in which profit margins have been good and the ratio of plant to annual sales or revenues low have found expansion from earnings a reasonably satisfactory method. A concern with small plant investment compared to sales can expand sales very rapidly with a small increase in

resources. On the other hand, a public utility with an investment of $5 in assets for every dollar of gross revenue must raise most of its funds from the sale of securities because most of the dollar of gross revenue must be used to pay operating expenses, taxes, interest, and dividends. The amount that could be withheld from stockholders by non-payment of dividends would be so small as compared to growth requirements that the withholding of dividends would be a hindrance rather than a help to expansion. Since securities would have to be sold to provide most of the funds for expansion, the most economical thing to do would be to make the stock attractive to the investing public. A fair dividend rate would facilitate the sale of stock and thus tend to keep the financial structure balanced as between bonds and stock. Withholding dividends would tend to keep the price of stock down in the market and make the management reluctant to sell new issues of stock. Such a tendency would eventually result in overbonding the properties. The proportion of earnings retained by companies having heavy fixed capital requirements should be determined, then, with reference to the necessity for selling dividend-carrying securities.

Closely related to the question of the adequacy of earnings to finance growth is the problem of timing expansion. If facilities are required immediately to take advantage of existing conditions of competition and markets, it is idle to wait for earnings to provide the means of expansion. Celerity of action is essential. Here, either short-term loans or long-term securities must be resorted to.

If it is not necessary to supplement reinvested earnings by the sale of securities, the question of expanding through reinvested earnings then simmers down to a question of advantages and disadvantages from the stockholder's standpoint. Reinvestment of earnings requires that the stockholder forego a current cash return. This is a matter of serious consequence to the stockholder who is dependent on current income from his holdings. If any substantial portion of the shareholders fall in this dependent group, the management will be faced with a clamor for the payment of dividends. Against the

inconvenience to shareholders must be arrayed the advantages to the corporation of avoiding other methods of financing. A new industry, which has not yet reached a stable basis, must ordinarily expand through reinvested earnings because its credit is so poor that it cannot obtain funds through other channels or because the cost of funds through other channels is prohibitive. A firm that is stable may have incurred fixed charges far beyond the point at which it is desirable to incur additional interest charges. Here two routes lie open to the corporation: it can reinvest earnings, or it can sell more stock. In either case, the stockholder must put up the additional funds. Up to 1936, there was a distinct advantage in putting up the funds by having the corporation withhold earnings. This advantage accrued from the fact that the individual did not have to pay income taxes on earnings not received as dividends. In 1936, the federal government levied a high, progressive tax [1] on undistributed net income of corporations. This tax tended to force corporations to declare all net income as dividends and then give stockholders the right to subscribe to new shares of stock. In this way the corporation forced the stockholder to put the earnings back into the business but avoided the tax on the undistributed net income of the corporation. This tax was unsound in its then stringent form. In the meantime it exercised a profound influence on method of financing expansion of American industries. Few corporations could afford to pay the prohibitive taxes that were levied on retained earnings. As a result of the havoc caused by this tax, Congress revised the revenue act.

[1] Section 14 of the Revenue Act of 1936 provided for a tax on undistributed corporate net income ranging from 7% to 27%, depending on the corporation's net income which is not distributed. The specific provisions are as follows:

7 per centum of the portion of the undistributed net income which is not in excess of 10 per centum of the adjusted net income.

12 per centum of the portion of the undistributed net income which is in excess of 10 per centum and not in excess of 20 per centum of the adjusted net income.

17 per centum of the portion of the undistributed net income which is in excess of 20 per centum and not in excess of 40 per centum of the adjusted net income.

22 per centum of the portion of the undistributed net income which is in excess of 40 per centum and not in excess of 60 per centum of the adjusted net income.

27 per centum of the portion of the undistributed net income which is in excess of 60 per centum of the adjusted net income.

Nature of Expansion and the Source of Funds.—The nature of the expenditures is very important in choosing the source of funds. As pointed out in the chapter on working capital, long-term facilities should not be financed through short-term loans unless profits will materialize so rapidly that the loans can be paid off. Otherwise the corporation will be faced with an embarrassing maturity. On the other hand, temporary expansion of inventories can readily be financed by short-term loans because sale of the inventories will provide the means of repaying the debt. The earning power of the property acquired is also important. If the new property will be productive of additional income, the property can be financed by bonds to the extent that the additional property will support bond values and the additional earnings pay bond interest. However, if the property will not increase earning power, that is, if it will be an unproductive betterment such as a grade crossing elimination, then it should not be financed by fixed charge securities unless the corporation already has unused borrowing power. The expenditure itself will contribute nothing to the ability of the corporation to carry the added debt. If possible, unproductive expenditures should be financed by reinvesting earnings. Increases in debt would decrease the earnings remaining to stock; increases in stock would spread the same earnings over a larger number of shares. In both cases the shareholder suffers a reduction in the scale of his income. This, in turn, will tend to affect the value of his shares permanently because purchasers tend to price shares in terms of per share earnings.

Bonds.—Financial principles do not change with expansion of a company. The expanding company should issue bonds only if its financial structure, after the financing, will preserve sound relationships of debt to assets and of debt to earnings. If the corporation has unused bonding power it can finance all expansion through sale of new issues of bonds. If it is overbonded, it should not expand through the sale of bonds even though the new properties would carry the bonds. It should first put its financial house in order by bringing its financial

structure back into balance. These are sound principles but are frequently abandoned under pressure. Governmental pressure on railroads to remove grade crossings and on local public utilities to make other types of unproductive betterments frequently comes at a time when opportunities for selling stock or of reinvesting earnings are far from satisfactory. In these cases the corporations have no choice in making the expenditures. They must get the funds, whatever the cost. Not infrequently the only channel immediately available is that of selling bonds. This further unbalances the structure, and successive demands make the unbalancing a progressive process. The near bankrupt railroad continues to sell bonds, and the stockholders continue to take what they can get in dividends against the day when the structure will topple and the stock values be wiped out.

The problem of expanding through the issue of bonds is similar to the problem of issuing bonds in the capitalization chapter. Assume that a public utility has the following relationships:

X Company

	Present	Estimated after Expansion
Total assets	$100,000,000	$120,000,000
Current liabilities	10,000,000	12,000,000
Bonds	20,000,000	
Common stock	60,000,000	
Surplus	10,000,000	
Average net earnings	7,000,000	8,400,000
Poor year net earnings	3,000,000	3,600,000

The problem is to determine if the corporation can issue bonds to finance the $20,000,000 expansion program. The first step is to determine what maximum amount of bonds the corporation can safely carry. Then it can be determined whether the old debt plus the new debt will fall within the maximum limits found. In the case of Company X, if the maximum relationship of debt to assets is 60%, the company can have $72,000,000 of debt (60% of $120,000,000). Twelve millions will be in current liabilities; so $60,000,000 can be in bonds. Bond interest should be earned a little more than two times on the average. Interest could absorb $4,200,000 at the twice-

earned standard (50% of $8,400,000). Interest should be earned in the poorest year. Hence interest should not exceed $3,600,000. Since $3,600,000 is the lower of the two earnings relationships, it will control. Assuming a 4½% interest rate for these standards, $3,600,000 available for interest would permit total bonded debt of $80,000,000. Since the asset limit of $60,000,000 is smaller than the earnings limit of $80,000,000, the asset limit will control. The company could have a total funded debt of $60,000,000 without violating sound standards. It now has a debt of $20,000,000. Consequently, it could finance the entire expansion of $20,000,000 with bonds and still have unused bonding power. An industrial structure would be tested in the same way. In some cases, it is not considered desirable to capitalize anticipated earnings by the issue of bonds. In these cases the bond limits of the company would be determined with reference to the existing assets and earnings of the company, making no allowance for the assets and earnings that would come from expansion. If the established earning power of the company would carry additional debt, it is created; otherwise, the expansion is financed by the sale of stock or by reinvesting earnings.

Preferred Stock.—The sale of preferred stock for expansion presents problems similar to those presented by the sale of bonds. The company must determine whether it has unused power to issue preferred. This it will do by applying preferred stock standards as was done in the case of bond standards. The preferred stock standards are discussed in the chapter on capitalization. If the corporation has unused preferred stock issuing power, it must then determine whether this is the best way to raise the funds considering the cost of capital, the state of the securities markets, and the earnings of the company. Preferred stock, unless it is participating or convertible, will ordinarily be sold to the general public through regular investment banking channels.

Common Stock.—Common stock is, of course, the safest type of security to issue. Representing an ownership interest, it never comes due. Annual payments for the use of the

funds do not bob up to embarrass the management.) However, whether the management should issue it depends upon whether it is desirable to trade further on the equity or not. With this point settled, the next problem is that of effects on the stockholders.

As was pointed out in the chapter on stock, the customary method of offering new shares is to give the present shareholders an opportunity to subscribe to new issues. The new shares will be priced sufficiently below the current market price to give the rights substantial values which will be lost if they are not exercised. This pricing process will thus force the stockholder or his vendee to supply the funds required by the corporation. Although the corporation is assured of the funds, the stockholder is faced with a variety of analytical problems. Foremost among these problems are those of valuing the rights for sale purposes and of determining the effect of the increased stock on the long-term value of a share of the company's stock.

Valuing Rights.—Valuing rights for purposes of purchase or sale is a very simple process. Since a purchaser has the option of buying outstanding shares or of buying rights and putting cash with them to obtain similar shares, he will give no more for rights than the difference between the cost of the old shares after they have sold ex-rights and the amount of cash he will have to put with the rights to get new shares. To illustrate: if the old shares sell at $175 ex-rights and a new share can be obtained for $100 plus one right, the value of the right is $75 because $75 plus $100 will equal the cost of a share by buying it directly in the market.

Assuming now that the stock has not sold ex-rights, the present market price of the stock obviously carries with it the value attaching to the right. When the stock sells ex-rights, it will decrease in value, other things being equal, by the value of the right. Here, the process of valuing is again based on market values. If the stock is selling at $250 a share and each old share is to receive the right to subscribe to a new share at $100, then the value will be determined as follows: $100 plus an old share worth $250 entitles the holder to two shares.

The combined value is \$350 against which two shares will stand. The value of each share will, therefore, be one-half of the aggregate or \$175. Since \$100 plus a right entitles the holder to a new share, the value of the right is \$175 minus \$100 or \$75. It will be noted that this is exactly the amount by which the value of the old share is decreased (\$250 — \$175 = \$75) when it sells ex-rights. This process of valuing is expressed in formula as follows:

$$\frac{\text{Premium of old shares in excess of cost by exercising rights}}{\text{Number of old share rights required to get a new share} + 1 \text{ (new share)}}$$

or,

$$\frac{P}{R+1}.$$

For our problem we have by substitution,

$$\frac{\$250 - \$100}{1+1} = \$75$$

Most discussions of the problem cease at this point. However, from the standpoint of stock market policy the difficulties are just beginning. First, there is the effect on the technical position of the stock resulting from the sudden increase in the supply of stock in the market. Any considerable increase in the supply of stock will in all probability cause a weakening of market prices until the excess has found its way into stable holdings. This decline will probably occur rather promptly after information concerning the issue of rights is available because short sellers will anticipate the effect.

The rights (and of course the shares) may sell at their highest level at any time prior to the final date of exercise. Whether they sell highest at first or later depends on how quickly the situation is discounted. If there is a sudden rush to unload, the rights may sell at a low level at first and then rise slightly. If liquidation is postponed, they will sell lowest later; that is, liquidation may carry the quotation to its lowest level at any time between the time of announcement and the final time for exercise.

However, the ultimate effect of the rights is of more consequence to the ordinary investor or long-term speculator. It is this phase of the question that is ordinarily slighted. A proper treatment involves a study of the capitalization, rates of earnings on assets, the period before which new capital becomes productive, and the opportunities of the concern for expansion. An example will illustrate the factors.

Example of Long-Term Effect of Rights.—Let us assume the following balance sheet and facts:

COMPANY X

Total assets	$150,000	6% bonds	$50,000
		Common stock	50,000
		Surplus	50,000
	$150,000		$150,000

1. Common stock represented by 1,000 shares.
2. Net earnings available for bond interest $30,000.
3. For some time, the old shares have been selling at $250, but just prior to announcement of the rights rose to $275 per share. On announcement, the price of shares fell to $260.
4. Stockholders are given the right to subscribe to one new share at $100 for each old share held.
5. The new capital is to be used to increase plant capacity. It is probable that the new facilities will produce the same rate of return on invested capital as do the old. However, it will require a year to finish the facilities and get them into operation. Hence, there will be no increase in earnings during the first year, but the facilities will be fully productive during the second year.

There are two ways to approach the determination of the probable value of this stock, say 18 months hence. One is to capitalize all earnings and then deduct bonded debt in estimating future stock values. The other is to apply a price-earnings ratio to per share earnings on stock. Probably neither method will exactly forecast market prices, but either will give an approximate standard for measurement. Whichever

method is used, the first step is to forecast earnings. The following table shows the changes in earnings, shares, and assets.

COMPANY X

Item	Prior to Rights	1st year	2nd year
Assets	$150,000	$250,000	$250,000
Shares	1,000	2,000	2,000
Earnings	$30,000	$30,000	$50,000
Interest	3,000	3,000	3,000
Net profit	27,000	27,000	47,000
Earned per share	$27	$13.50	$23.50

The first and second years after the issue of the rights reflect an increase of assets of $100,000. In the second year these assets become fully productive, giving net earnings of 20% on assets employed. By hypothesis the fixed charges have not changed. If we assume that, for some time prior to the issue of rights, the price of stock established a reliable rate for the capitalization of earnings, we can then estimate reasonable market values 18 months hence by either method as follows:

(1) CAPITALIZATION OF TOTAL EARNINGS METHOD.

Before Rights	
Market price of stock	$250,000
Bonds	50,000
Total capitalization	$300,000
Annual earnings	30,000
Rate of capitalization	10%
18 Months after Rights	
Annual earnings	$50,000
Rate of capitalization	10%
Capitalization	$500,000
Bonds	$50,000
Stock	$450,000
Shares of stock	2,000
Estimated price per share	$225

(2) PRICE-EARNINGS RATIO METHOD.

Before Rights	
Price of stock per share	$250
Earnings per share	27
Ratio of price to earnings	9.26
18 Months after Rights	
Earnings per share	$23.50
Ratio of price to earnings	9.26
Estimated price per share	$218.00

The current value of the rights would be determined as follows:

$$\frac{\$260 - \$100}{2} = \$80$$

The present price of shares is $180. We can expect the shares to sell well over $200 when the new capital becomes fully productive. The intermediate price is a matter of conjecture. It will depend in part first upon the market's absorption of the increased floating supply of shares and later upon the public reaction to decreased per share earnings, for during the first year, the number of shares is doubled without any increase in earnings. The result is that per share earnings are halved. Whether prices will sag or not will depend on the amount of uninformed selling as compared with the amount of informed buying.

In case the new capital were to be less productive than the old capital, the estimated future values would be radically different. But in either case it is necessary to estimate both the amount of earnings that will be derived from the new capital and the period in which they will begin to materialize. If the earnings are reasonably accurately estimated and tabulated, the estimated per share values can be computed with ease.

It is obvious from what has been said that the right to supply new capital to an enterprise that earns more than a normal return is a very valuable one. In the past, this right has been preserved to the stockholders by the common law requirement that shareholders be permitted to subscribe *pro rata* for new issues of shares. Recently, however, statutes have been passed in several states to permit corporations with charters expressly eliminating the ~~preemptive rights of stock~~holders. Many of the newer consolidations have taken advantage of these provisions. Elimination of preemptive rights leaves the directors free to dispose of stock to parties of their own choosing and, within limits, at their own prices. This change in corporate practice is fraught with great possibilities for abuse; so the statutes permitting it should be again amended to wipe out the possibility of such provisions.

Proceeds for Refunding.—Rights may be issued in order to obtain funds for refunding or to build a more comfortable cash position as well as for additional operating facilities. In these cases the stockholder's analytical process is the same, but the problem is somewhat more complicated. The key to the value of his stock is still the future earning power of the company. He must estimate the future earnings and then find the effects of the changed number of shares on per share earnings. For example, assume the following figures:

COMPANY R

	Before Issue of New Stock	After New Stock Issue
Net earnings	$5,000,000	$5,000,000
Interest charges	$2,000,000	None
Number of shares of stock	300,000	700,000
Per share earnings	$10	$7.11

Here, the company has issued 400,000 shares in order to retire $40,000,000 of 5% bonds having a total interest burden of $2,000,000. Retirement of the bonds makes the entire net earnings of the company available to the stockholders but increases the number of shares (among which the earnings must be divided) from 300,000 shares to 700,000 shares. Since the company was earning more than 5% on the funds obtained from the bondholders, the earnings per share were $10 before the bonds were retired. After the bonds were retired, the stock earned only $7.11 per share because it lost the advantage of trading on the equity. The financial structure of the company is strengthened, but whether the stock will sell at a higher price than it did before because of its added strength will depend on the market's attitude toward the additional strength. If the company was so strong that its solvency would never be threatened, the additional strength will not cause a corresponding rise in share prices. The shareholder looks at the surplus protection much as he would look at a $30,000 fire insurance policy on a $20,000 house, knowing that he could never collect more than the actual value of the property destroyed. The shareholder is foregoing the increased earnings from trading on the equity for an additional safety factor that he does not

need. Consequently, he will pay little more for a dollar of per share earnings than he did before; and since per share earnings have decreased, the shares will sell for less in the market than they formerly did. On the other hand, if the shares were depressed because of an unstable financial structure, strengthening the structure would give added value to the shares.

Analysis of a change in cash position follows similar lines. If the cash is not to be used for productive purposes, the prior earnings will merely be spread over more shares and thus reduce per share earnings. Whether the price-earnings ratio will rise to a point at which the smaller per share earnings will bring the same price for the shares of stock will depend on how much the new cash improves the corporation's solvency. If the stock was depressed because of fears that the company might not pull through in a period of financial stress, the new funds may relieve the strain to a point where the stock will rebound to a higher price per share, even though per share earnings are decreased by the increased issue. Each situation must be analyzed on its merits.

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CHAPTER 17

CONSOLIDATION

Industry in the United States has constantly evolved larger and larger business units. Wherever we look, the tendency has been the same. Railroads, gas companies, street railways, electric power companies, steel companies, copper companies—all have grown by the aggregation of many small undertakings into larger corporate businesses. The process has been at work for more than a century.

Railroads.—The largest group in point of invested capital is the railroad industry. This industry got under way on a practical basis around 1830. From then until the middle 1850's the industry was characterized by the construction of many small lines connecting neighboring towns. These small lines were usually constructed by separate corporations; so there was neither continuity of travel nor physical connection of lines. The generation from the 1850's to the panic of 1873 has been designated as one of end-to-end consolidations—a period in which the small lines between towns were welded into continuous lines between the large cities. That from the panic of 1873 to the panic of 1893 was a period of system formation—when lateral lines were tied to the longitudinal consolidations to form networks. From 1893 to the present has been characterized by the formation of super-systems, systems of systems, moving ever toward a few comprehensive organizations covering large geographic areas. The accompanying map and chart of the Pennsylvania system illustrate the nature of this movement.

These changes in the railway system are not confined to the specific periods mentioned, but rather they were going on continuously from the very first. For example, as early as 1832, the Maryland legislature authorized the Baltimore & Ohio

Railroad Company to acquire stock in the Washington Branch Road. This company has followed the policy of acquiring stock interests in other railroads throughout its history. The fusion of many companies into single companies, the leasing of one road to another, and the acquisition of control of the voting stock of one road by another have been methods common to all of these periods. System formation and longitudinal consolidation have overlapped historically. But, taking appearances of the railway industry as a whole, it is clear that the outstanding characteristics of the financial and industrial evolution of this group of companies is fairly presented by the periods designated. It is to be noted that these periods are bounded by major depressions. This matter will be discussed in more detail later. But it is well to note that business expansion and combination flourish under conditions of optimism and financial ease and wither in periods of pessimism and financial stringency. Hence, the first major period of railroad combination is ushered in by the "Credit Expansion Prosperity" of the 1850's and is terminated by the "Long Depression of the 70's." The next period gathers momentum in the "Gold Resumption Prosperity" of the early 80's and terminates in the "Panic of 1893." Although the present super-system consolidation movement has been under way since the 1890's, it has been active or quiescent according to the swings of the business cycle—active in prosperity, quiescent in depression, but ever looking forward to larger combinations.

Local Public Utilities.—Next in importance to railroads are the local public utilities, the electric power and light, the street railway, gas, telephone, telegraph, water, steam heat, bus, etc., industries. These industries, as a group, rival the railways in point of investment and financial importance. Like the railroads they have passed through an evolution from small, scattered companies to large consolidated enterprises.

Electric Power.—The electric power industry dates from 1882 when small power plants were established in New York City and in Appleton, Wisconsin. In this early period direct current equipment was the rule, and electricity could not be

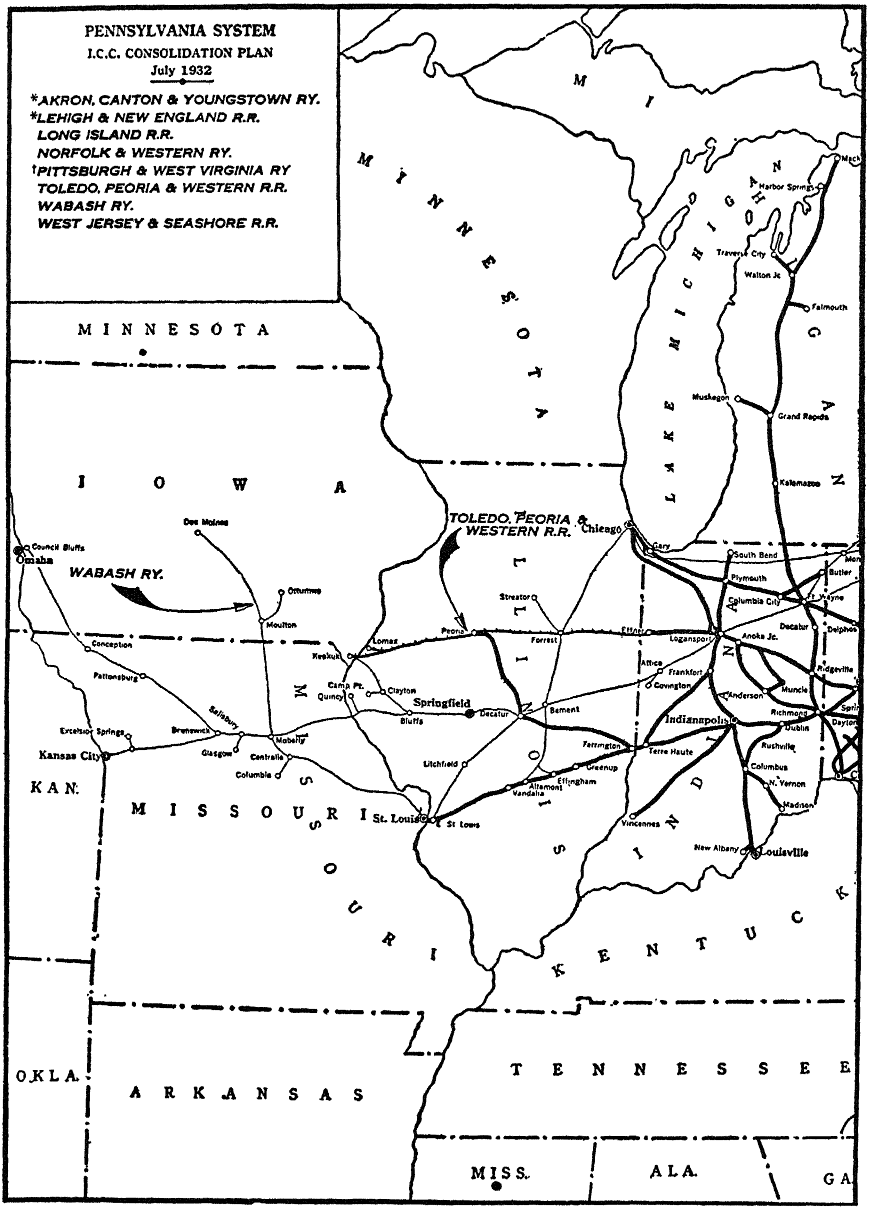
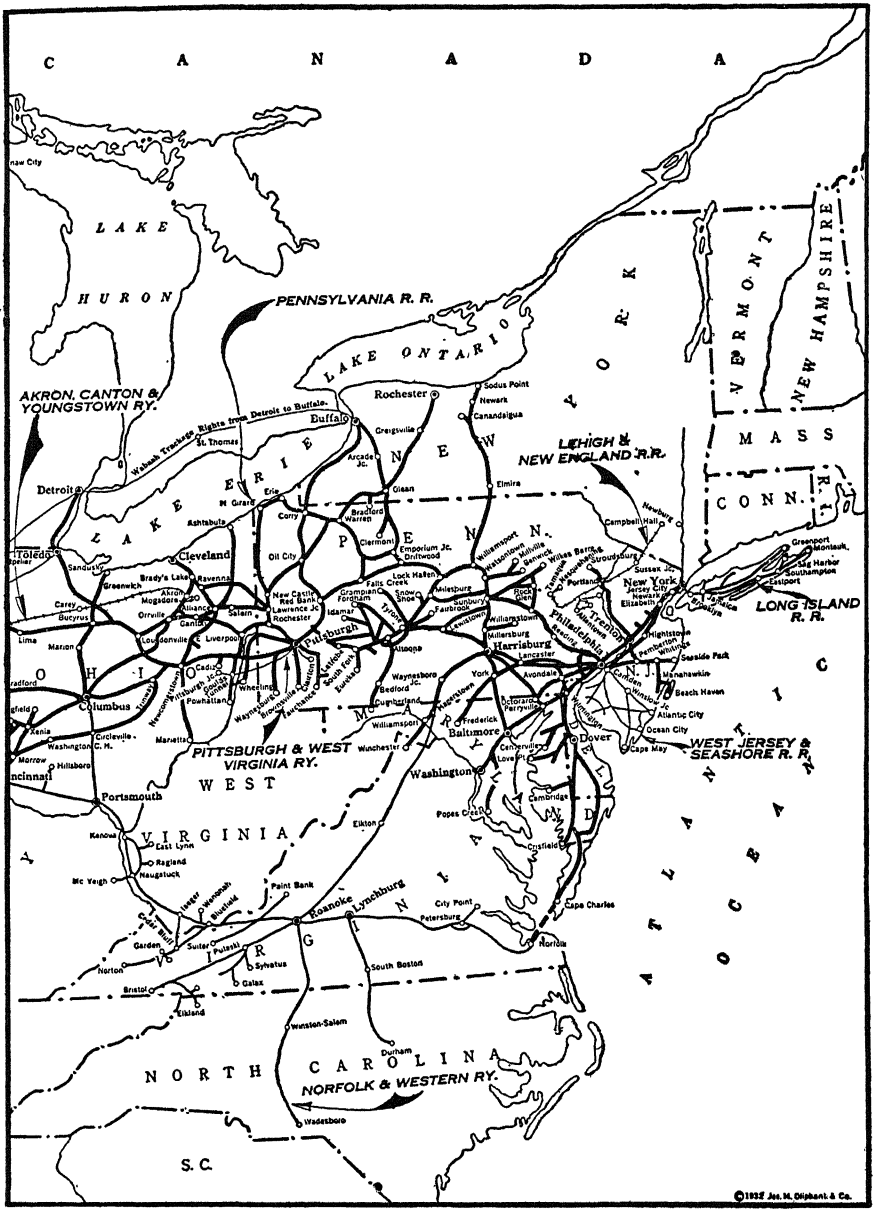


Figure 16. Map of the Geographic Areas
(Source: Mundy's *Earning*



Covered by the Pennsylvania Railroad System
Power of Railroads, 1937)

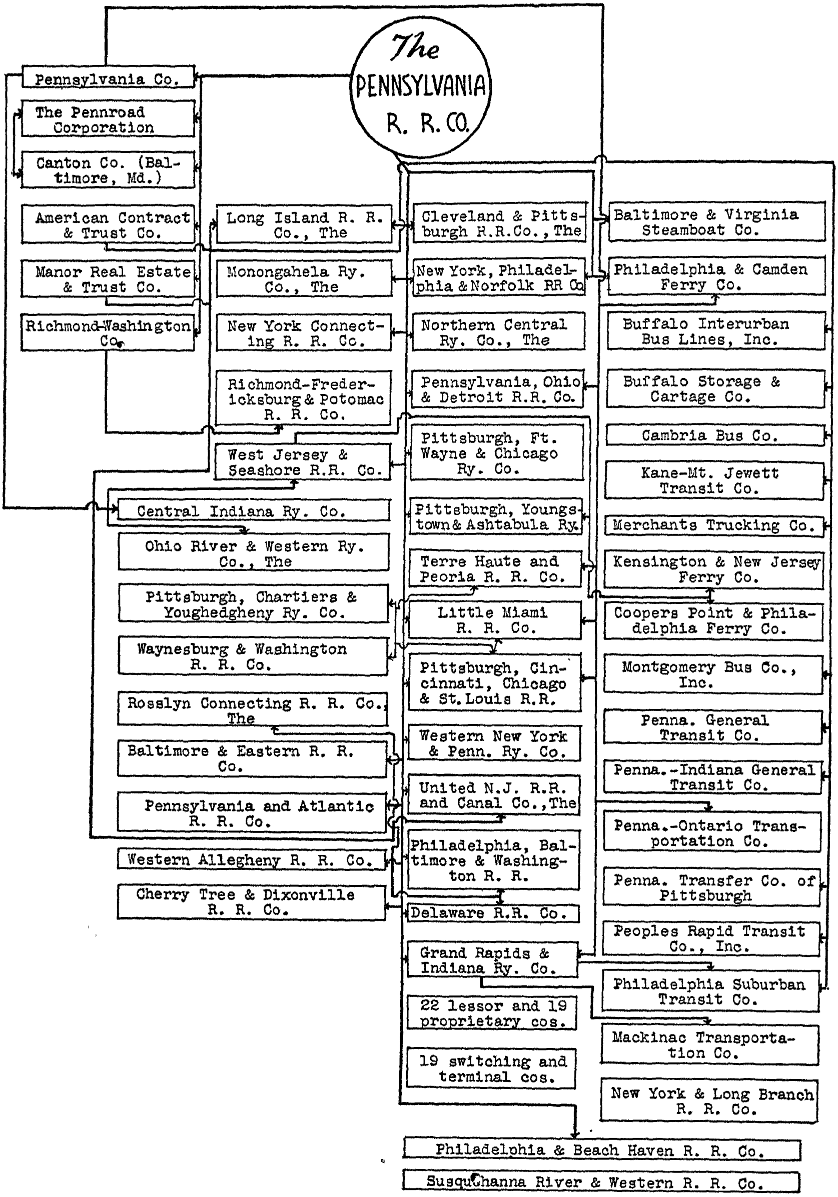
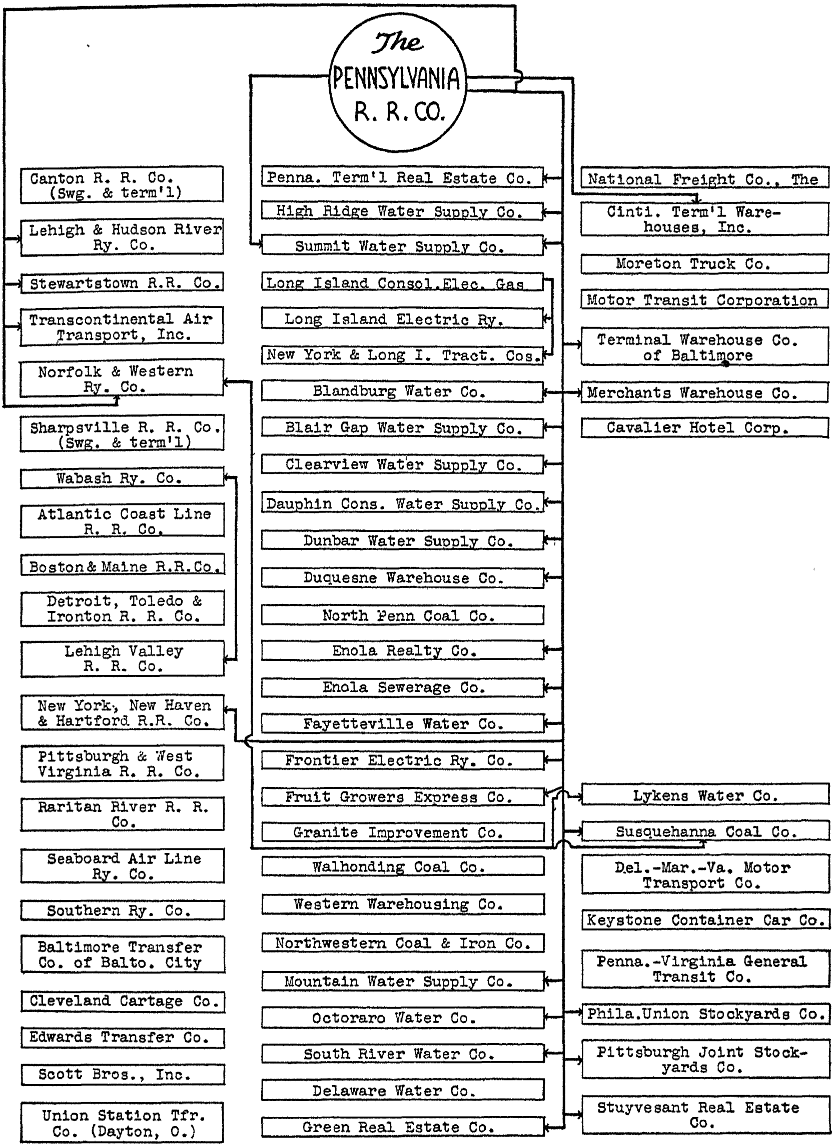


Figure 17. Chart of the
(Source: *Regulation of Stock*



Pennsylvania Railroad System
Ownership in Railroads, 1931)

transmitted any considerable distance. As a result, many small plants were built in the same town. Such communities as Scranton, Pennsylvania, for example, had four separate plants, and Duluth, Minnesota, had five. As technical processes improved, long distance transmission became economically feasible. Small local plants gave way to large strategically located generating stations. Economies of large-scale generation and management resulted first in the consolidation of plants within a community, later in the formation of state-wide operating companies and nation-wide holding company systems.

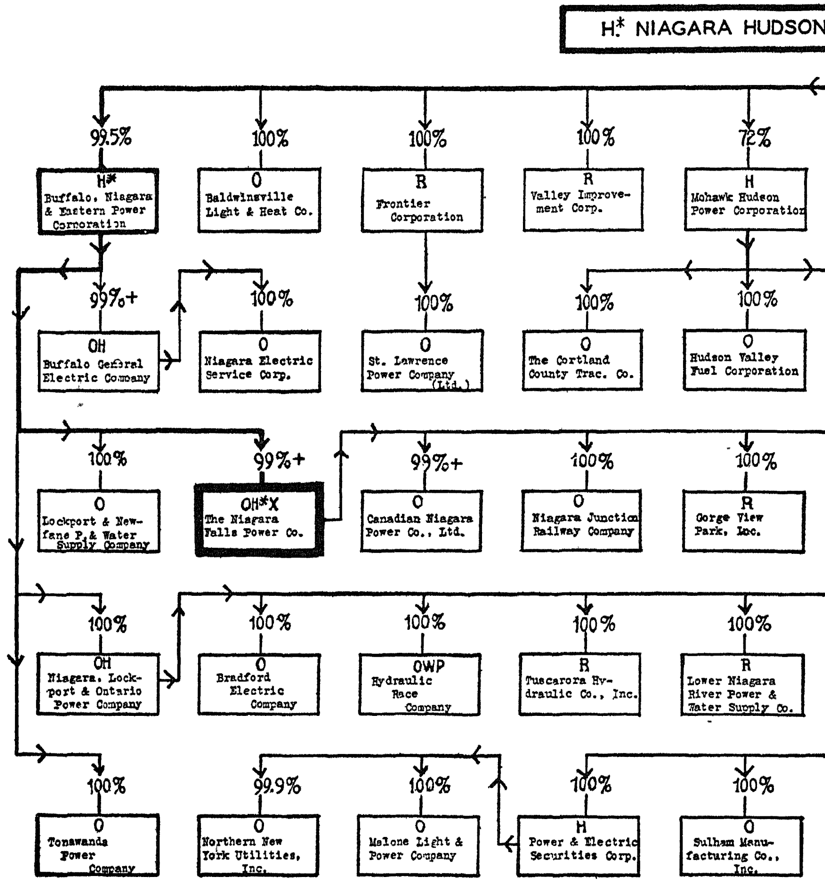
Consolidations started at a very early date. In 1881, the year before the first commercial electric plant, the Oregon & Transcontinental Company was organized to promote the electrification of lateral railway lines in the Northern Pacific Railroad system. After a hectic existence of nine years, this company caused the North American Company to be organized to take over its assets and function as a holding company in the electric light, power, and street railway fields. Since 1890 the North American Company has developed one of our largest public utility holding company systems, with interests scattered across the continent. In its wake hundreds of other holding companies arose. So today, the entire electric light and power industry has come under the control of a few major financial interests. The chart, pages 264-265, shows how a group of scattered New York public utility enterprises was concentrated under single financial control.

Similar concentrations have taken place throughout the country. As early as 1925 the Federal Trade Commission reported that 39 corporations controlled approximately 71.5% of the electric generating capacity of the country. Since that time, consolidation has increased greatly. The accompanying table shows the essential statistics of electric power industry growth from 1912 to 1937 inclusive.

Gas.—The gas industry antedates the railroad industry by nearly 15 years, but it has never assumed the importance of the latter industry. Beginning in the United States with the incorporation of the Gas Light Company of Baltimore in 1816, it

ELECTRIC LIGHT AND POWER INDUSTRY STATISTICS 1912-1937
(Source: *Electrical World*)

	1912	1917	1922	1927	1932	1937
CAPITAL invested ($1,000)	2,289,622	3,245,185	4,817,000	9,500,000	12,600,000	13,800,000
Securities sold ($1,000)			719,961	2,152,257	465,921	646,312
By investment houses			589,961	1,889,000	447,921	646,312
Direct to customers			130,000	263,527	19,000	
REVENUE ($1,000)	302,273	526,894	1,072,120	1,802,655	1,979,990	2,376,000
EXPENDITURES ($1,000)						
Additions and extensions			324,016	760,353	260,000	455,480
Operating Total	234,419	426,568	481,570	828,168	833,580	1,028,000
ENERGY (1,000,000 kw.-hr.)						
Total	11,569	26,663	44,422	76,369	79,505	119,000
SYSTEMS, STATIONS						
Number of establishments	5,221	6,542	6,355	4,335	3,429	
Commercial establishments	3,659	4,224	3,774	2,137	1,627	
Municipal establishments	1,562	2,318	2,581	2,198	1,802	
Transmission (circuit miles)			86,290	185,449	208,097	
Generating plants (all)	5,221	6,542	5,444	4,801	4,339	3,814
Commercial	3,659	4,224	3,615	3,589		
Municipal	1,562	2,318	1,820	1,207		
RATINGS						
Generator rating (kw.)	5,160,000	8,984,000	15,368,000	25,811,305	34,010,137	35,042,000
FUEL CONSUMPTION						
Coal and coke (sh. tons)		21,565,273	26,130,865	37,500,630	27,589,000	42,398,000
Oil (bbl.)		6,158,219	11,855,969	7,145,798	7,269,000	14,545,000
Gas (1,000 cu. ft.)		14,199,204	20,174,385	65,522,792	107,138,000	162,000,000



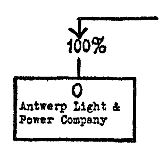
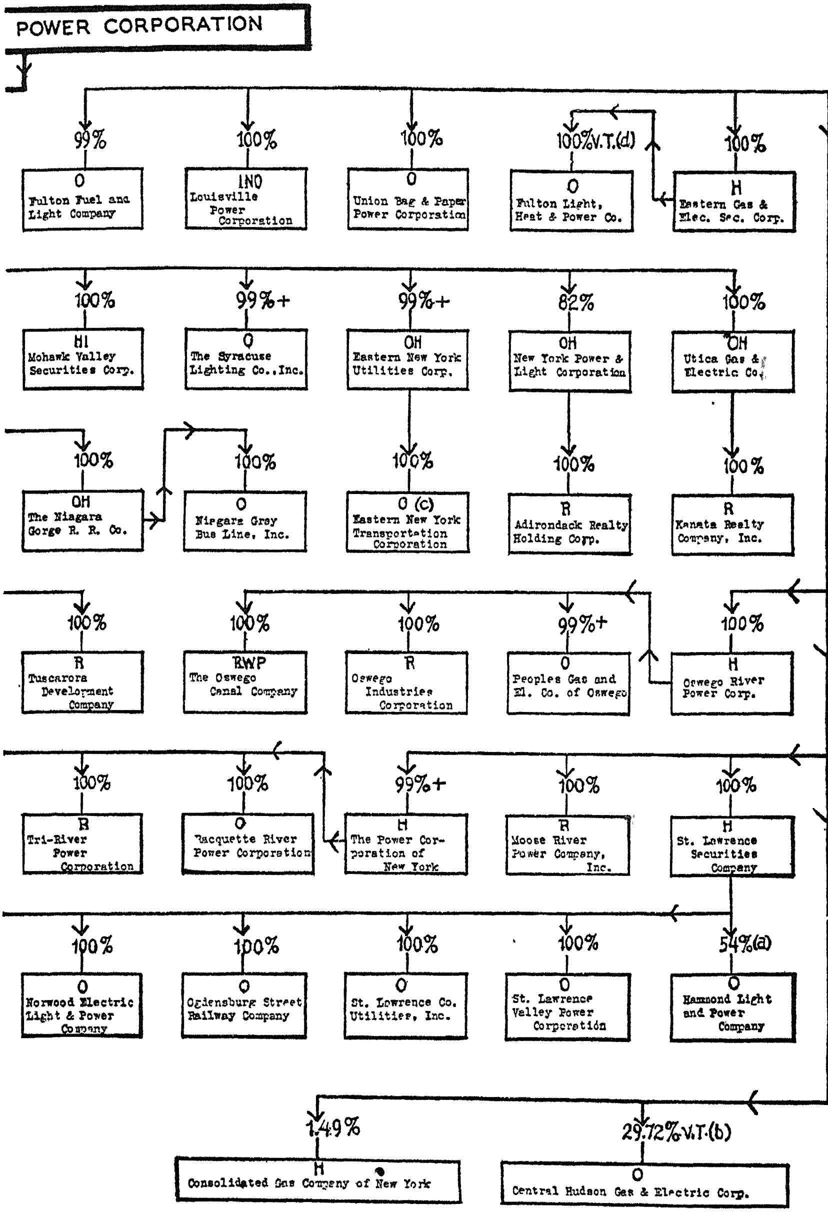


Chart showing control of subsidiaries' voting stock as of June 30, 1931.

O Operating company
H Holding company
X Licensee
* Filed return.
R Real estate company
I Investment company
WP Water power company
VT Voting trust certificates

(a) This control is not exercised by controlling company for management or operation.
(b) Controlling company has no control over action of said trustees or management of this corporation's affairs.
(c) Dissolution pending.
(d) Voting trust certificates issued by management trustees who control 100% of common stock with 59% voting control.

Figure 18. Niagara Hudson
(Source: *Holding Company Control of*



Power Corporation

Licensees of the Federal Power Commission, 1932)

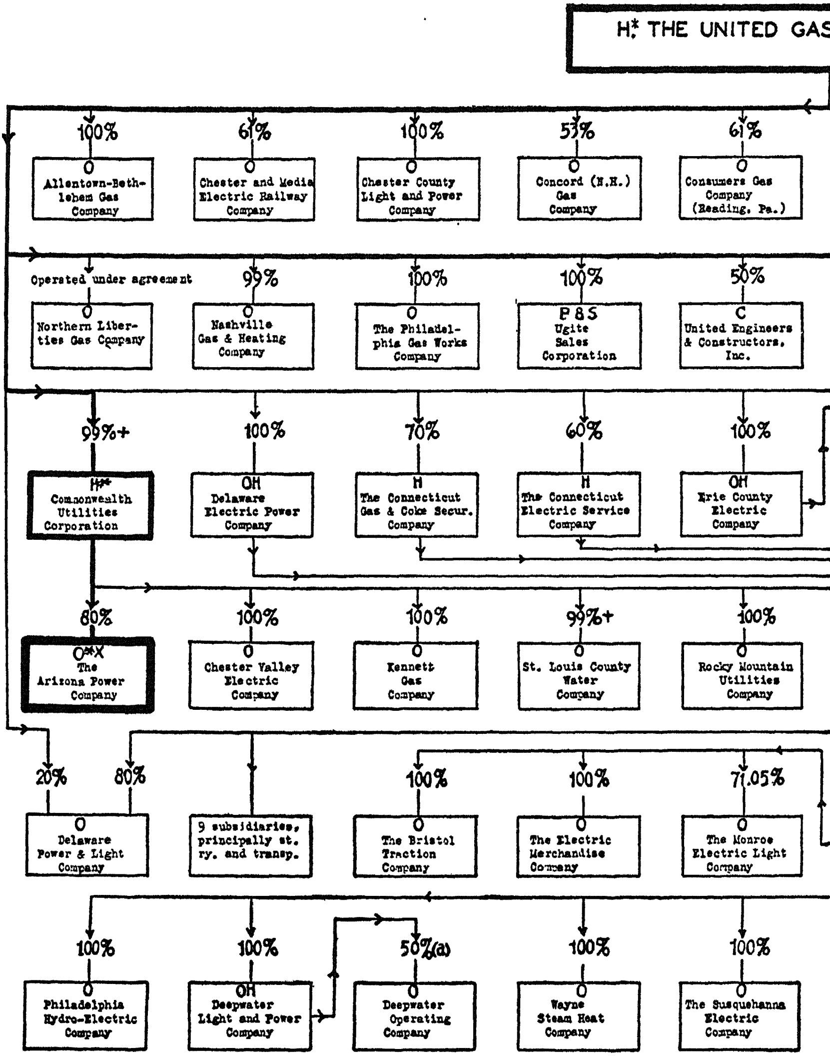


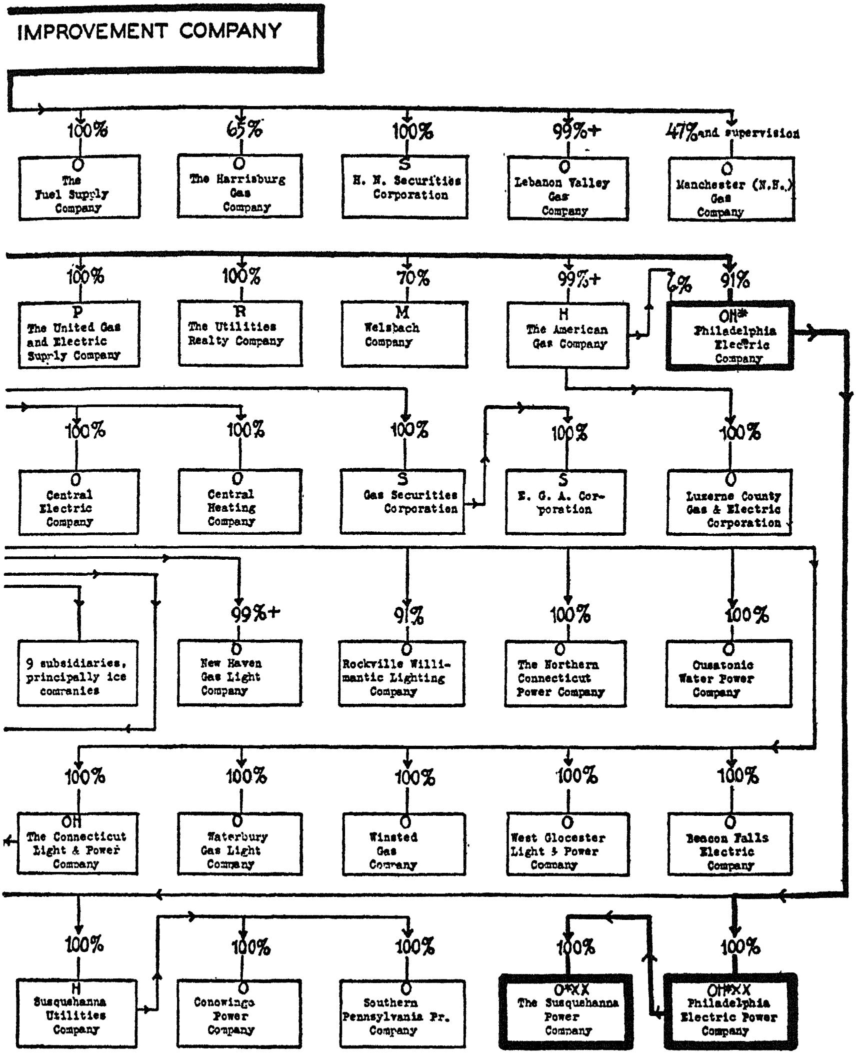
Chart showing percentages of ownership of subsidiaries' voting stock as of June 30, 1931.

(a) Controlled jointly with Atlantic City Electric Co. of the American Gas & Electric System. Atlantic City Gas & Electric Co. owns the other 50%.
H Holding company

O Operating company
P & S Purchases and sells residuals of coal
C Construction company
P Merchandising company (Non-operating)

Figure 19. The United Gas

(Source: *Holding Company Control of*



R Real estate company
S Security company
M Manufacturing company
* Filed return
X Licensee

XX Licensee project No. 405 owned jointly by Philadelphia Electric Power Co. and The Susquehanna Power Co., which is leased to Philadelphia Electric Co.

Improvement Company

Licensees of the Federal Power Commission, 1932)

has had an evolution similar to that already described for the electric power and light industry. Indeed, it was in this field that the United Gas Improvement Company flourished, a pioneer holding company which served as a model for many of the holding companies in the electric field. Since interconnection and long distance transmission of gas have been relatively recent developments in this industry, management considerations have predominated in the consolidation movement. Early consolidations took the form of centralized stock control of several companies or fusion of electric and gas companies into single operating units. In those cities where several local gas companies had sprung up, for example, in Chicago and New York, the separate gas companies were fused into single gas companies serving the entire area. Because electricity and gas competed for lighting purposes in the beginning of the electric power industry, the consolidation of the two types with each other has been particularly marked from the early stages of the parallel development of these industries. Similarities of management problems, and other factors added to the early competitive features, have combined to make the late history of the consolidation movement in the gas industry a composite history with that of the electric power industry. The chart, pages 266-267, of The United Gas Improvement Company shows how the gas companies have been locked into systems with other types of companies.

Water, Telegraph, Telephone, Bus, Street Railway.—Central water works date from the Boston water supply system of 1652. Their development, of all public utilities, has been least affected by the consolidation movement. Interconnection has not been extensive, nor have the management problems been great. In fact, the simplicity of operations has made public ownership the rule in this class of utilities. Nevertheless, where private ownership exists, consolidation has found its place. The private companies have gradually been welded into holding company systems with centralized management. The chart, pages 270-271, of the water works subsidiaries of the American Water Works and Electric Company,

Inc. shows the type of consolidated structure used in this industry.

The telegraph industry has had a growth exceedingly similar to that of the railroads. The early companies built lines between towns as did the early railroad companies. These were then consolidated to form a nation-wide network. The Western Union Telegraph Company was incorporated on April 1, 1851. As early as 1864 it was a holding company with interests in several other companies. By 1927 it had acquired and controlled by purchase, lease, or stock ownership, some 536 telegraph corporations and properties, of which about 58 corporations maintained their corporate identities and organizations. Aside from the telegraph business done by American Telephone and Telegraph Company, the Postal Telegraph & Cable Corporation is the only other important interest in this field.

The telephone industry is the most concentrated of the public utility industries. Nearly 90% of the entire investment in telephone facilities is controlled by the American Telephone and Telegraph Company. Likewise, as early as 1914, two-thirds of the street railway industry was under the control of holding companies. Lately the bus and trucking industries have been similarly concentrated.

Industrials.—In financial parlance the term *industrials* is used as a catch-all for those corporations which are not steam railroads, governments, local public utilities, or banks or other financial companies. In the "street" this heterogeneous group is broken down into the "oils," the "steels," the "motors," the "coppers," etc. Manifestly it would be impossible, in a volume of this kind, to trace the consolidation movement in each of these industries. Hence, the oil industry is taken as a sample.

The petroleum industry is in many ways one of the most interesting studies from the point of view of the consolidation movement. It provided one of our first major monopoly problems and has given big business the name "trust." It was in this industry that many of the early anti-trust battles were staged between the companies on one side and the state and

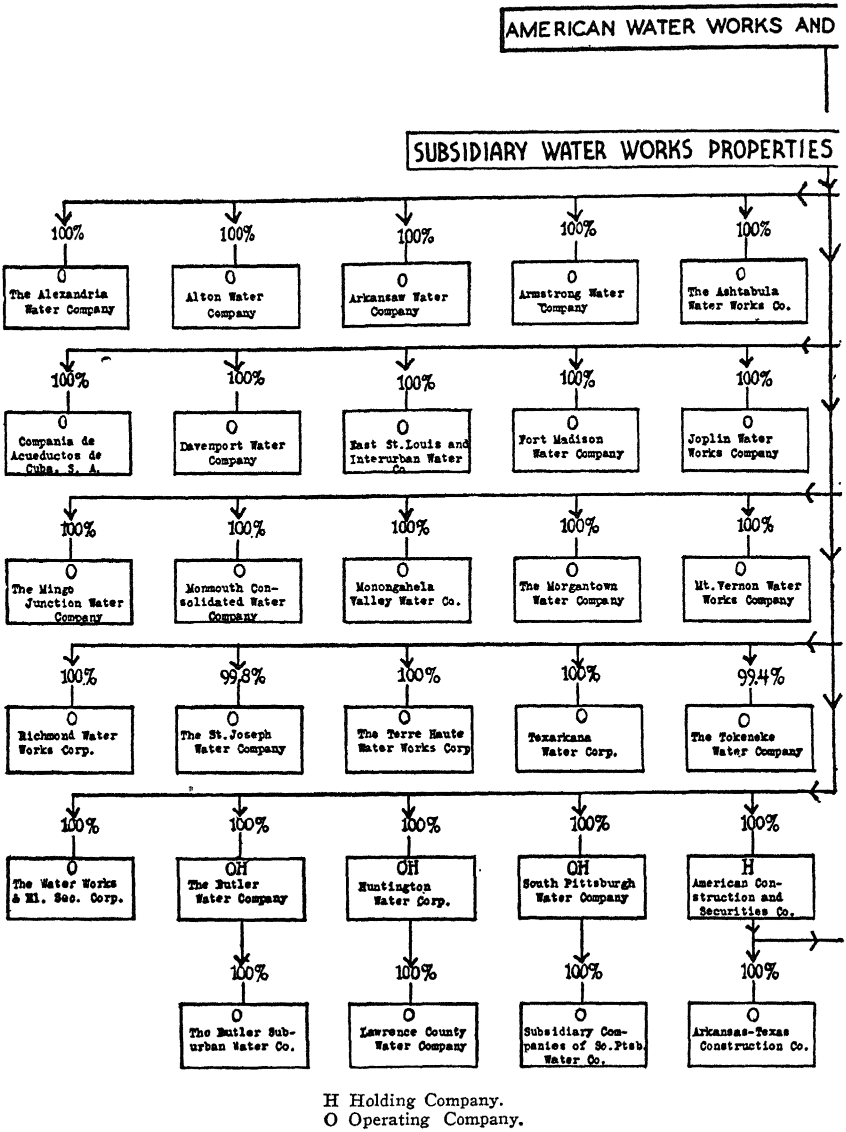
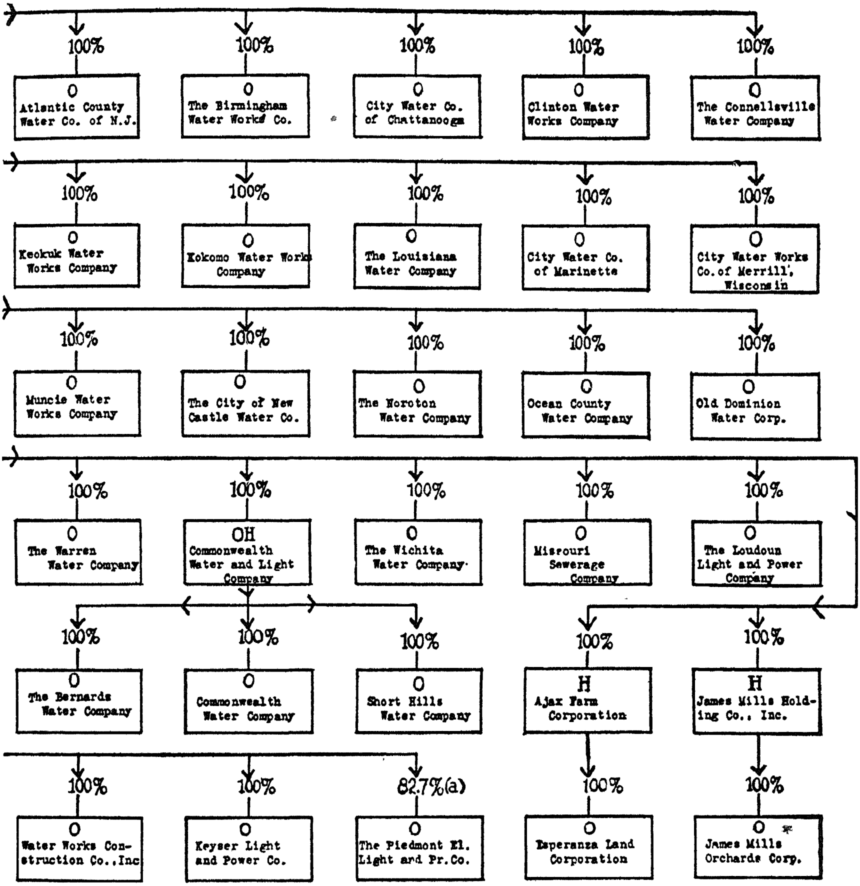


Figure 20. American Water
(Source: *Holding Company Control of*

ELECTRIC COMPANY, INC.

---MISCELLANEOUS COMPANIES



(a) 17.2% control by The Potomac Edison Company. (See other chart for position of The Potomac Edison Company in System.)

Works and Electric Company, Inc.
Licensees of the Federal Power Commission, 1932)

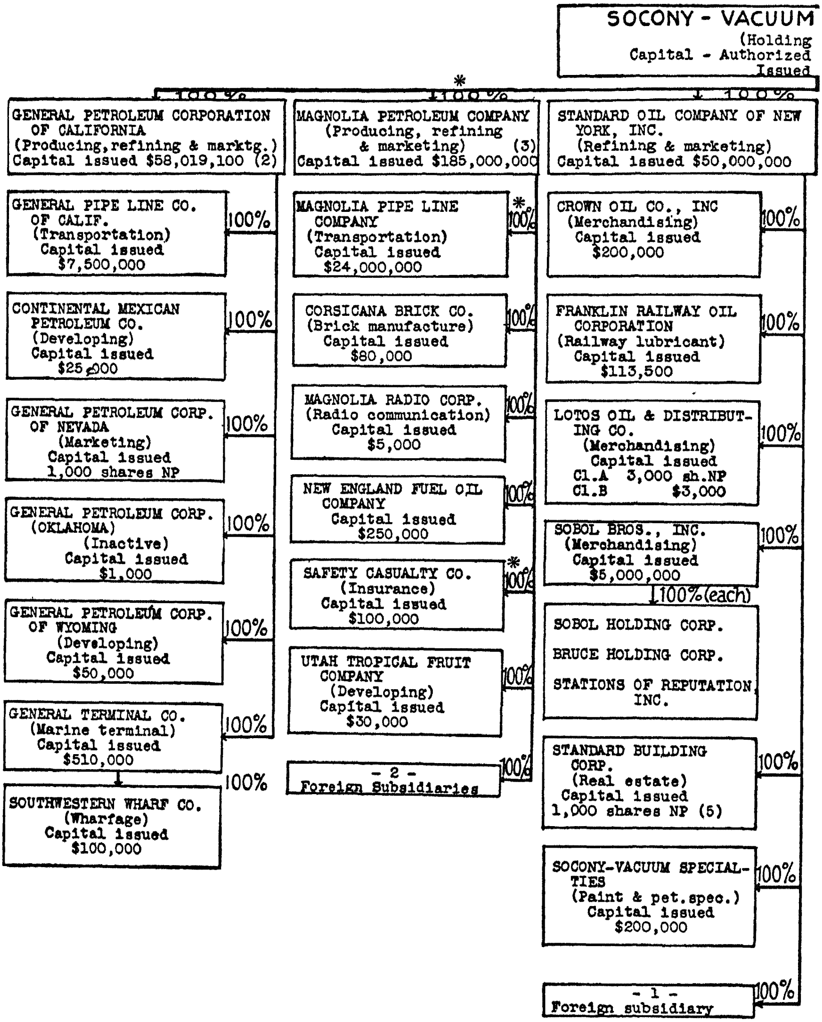
federal governments on the other. It was only three years after the discovery of oil in Pennsylvania that John D. Rockefeller, in 1862, became financially interested in the oil industry. By 1879 he controlled 90% of the refining business and all of the important pipe lines. In 1882, he organized the Standard Oil trust, placing the controlling voting stocks of 40 companies in the hands of a single group of trustees. Uniformity of policy was obtained by voting the stock of each company according to a common plan. The trust was broken up by the courts, but the term *trust* has remained, to this day, as a synonym for big business. In 1897, the Standard Oil Company (New Jersey), a holding corporation, was formed. This company owned outright the voting stocks of the same companies that the trust had been forced to release. The holding corporation was obviously a device to accomplish the same illegal end, monopoly, as was its predecessor, the trust. Hence proceedings under the Sherman Anti-Trust Law were instituted against the company. In 1911, the court handed down a decree dissolving Standard Oil into 33 independent companies.

Although monopoly has been prevented, the industry has developed along the same consolidation lines as have others. Large integrated units, containing oil wells, pipe lines, refineries, and filling station chains dominate the industry. The chart, pages 274-275, of the Socony-Vacuum Corporation is a fair sample of the intercorporate structure of the industry.

Composite Consolidation.—What has been said should not convey the impression that consolidation takes place only in the same industry. It is, perhaps, most uniformly successful when confined to companies of like or closely related kind; but it is by no means so confined in practice. Accident, avarice, and a variety of other factors cause corporate interests to ramify widely. The chart, pages 276-277, of Cities Service Company shows how a major public utility holding company became primarily an oil holding company because it accidentally struck oil while drilling for natural gas. In 1938, the two major businesses were again separated as a consequence of the Public Utilities Act of 1935.

Motivation of Consolidations.—Consolidations are ordinarily promoted for one reason—profit; not altruism, not philanthropy, but a plain desire to "make money" conditions the entire procedure. Occasionally there are exceptions. The author once promoted the consolidation of two banks from purely public service motives. But he doubts very seriously that the promotion would have been consummated had not the Comptroller of the Currency closed the recalcitrant bank shortly after negotiations had broken down. Waiving aside such uncommon occurrences, the lure of profit must ordinarily lead the promoter on. The prospective gain may be found in the greater efficiency of the combined enterprise over that of the separate companies. It may come from selling the public an overly liberal amount of securities in the new enterprise. But whatever the source of profit, the promoter expects the transaction to be well worth his while. That the promoter may not succeed in making economies, or in "selling the public," is not always material to a study of consolidation causes. That the promoter thinks he will succeed is the factor that sets the procedure in motion, and for good or for ill produces the consolidated enterprise. Hence, a study of the results of past consolidations may be of little avail in forecasting what consolidations may take place in the future. Optimism provides tremendous power.

Cyclical Timing.—The movement for consolidation usually starts slowly; but once under way, gathers momentum. The speed of the process is principally conditioned by two factors: (1) the opportunities for profit and (2) the public appetite for securities. The latter factor, in large measure, controls the former. Usually, promotion profits are secured by obtaining a liberal portion of the securities of the combined enterprise; and usually, the rough spots in negotiations are smoothed by promising liberal amounts of securities in the new enterprise. These excess quantities of securities are obtained by issuing more securities for the new enterprise than were already issued for the old. If economies result from the combination, the earnings may be sufficient to give value to the increase in

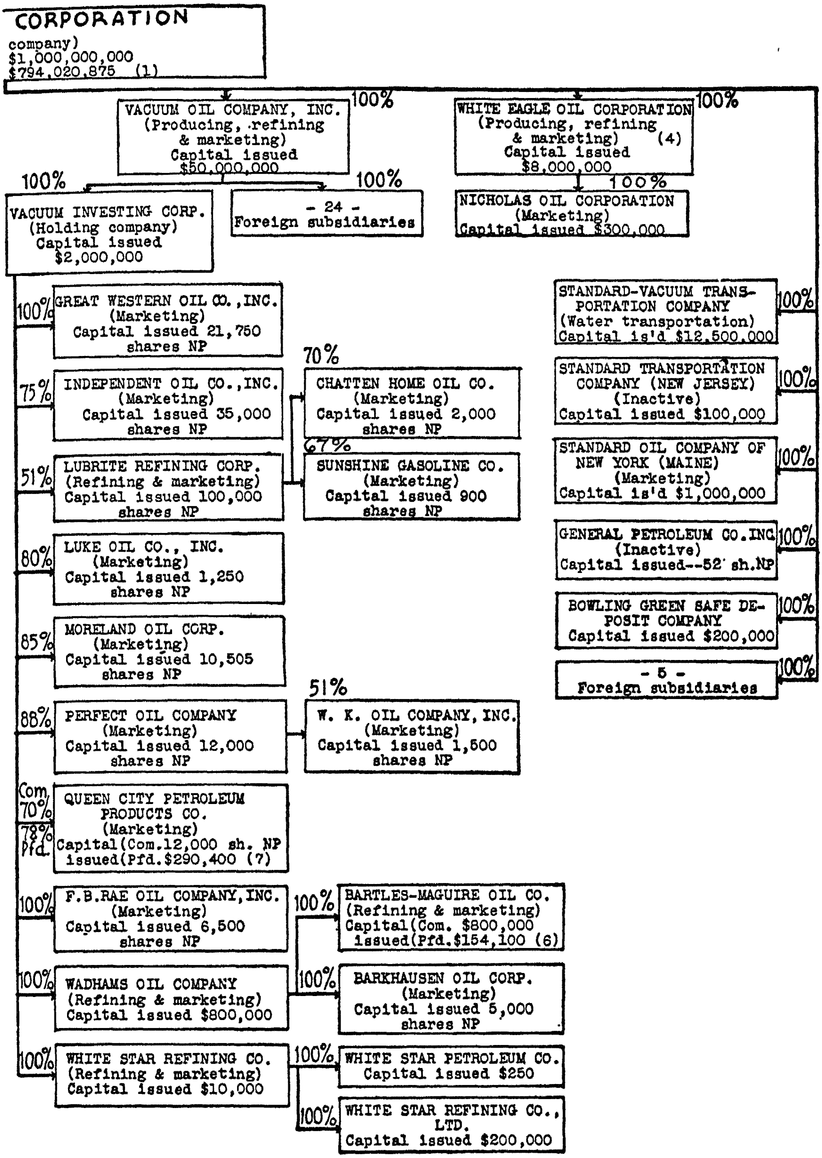


Percentages indicate ownership of issued capital including directors' qualifying shares when shown with *.

(1) Funded debt outstanding $66,000,000 (Held by S. O. Co. of N. Y., Inc. $ 41,000
Vacuum Oil Co., Inc. 10,000)
(2) Funded debt outstanding 17,263,500
(3) Funded debt outstanding 4,500,000 (Held by S. O. Co. of N. Y., Inc. $ 57,000
Vacuum Oil Co., Inc. 300,000)
(4) Funded debt outstanding 3,785,000 (Held by S. O. Co. of N. Y., Inc. $502,000
Vacuum Oil Co., Inc. 98,000)
(5) Funded debt outstanding 2,072,500 (Held by S. O. Co. of N. Y., Inc. $ 92,500)
(6) Funded debt outstanding 359,000
(7) Funded debt outstanding 53,342.79 (Held by Vacuum Oil Co., Inc. $ 5,000)

Figure 21. Socony-Vacuum

(Source: *Report on*



Corporation System
Pipe Lines, 1933)

CITIES SERV-

Cities Service Power & Light Company

Benton County Utilities Corporation
Buchanan County Power Transmission Co.
Carolina Engineering Construction Company
Citizens Gas Fuel Company
City Light & Traction Company
The Cumberland & Westernport Transit Co.
The Danbury & Bethel Gas & Elec.Light Co.
Deerfield Electric Service Company
Durham Public Service Company

Fremont Gas Company
The Knoxville Gas Company
Lawrence County Water,Light & Cold Stor.Co.
Lenawee County Light & Power Company
The Ohio Public Service Company
Ozark Power & Water Company
The Pueblo Gas & Fuel Company
St. Joseph Railway, Light, Heat & Power Co.
Spokane Gas & Fuel Company
The Toledo Edison Company of Michigan

Toledo Light & Power Company

The Anchor Realty Company
The Citizens Light & Power Company

The Toledo Edison Company

Ohio Utilities Finance Company

The Gibsonburg Electric Light Company
The Illuminating Company
Lake Erie Public Service Company
The Luckey Light & Power Company
Sandusky Connecting Railway Company
The Webster Light & Power Company

The Lake Shore Power Company (Ohio)

Lake Shore Power Company (Indiana)
The Maumee Construction Company

The Toledo & Indiana Railroad Company

The Toledo & Indiana Building Company
Toledo & Northwestern Transportation Co.

East Tennessee Light & Power Company

Tennessee Eastern Electric Company

The Johnson City Traction Company
Tennessee Eastern Power Company
Tennessee Realty Company

The Empire District Electric Company

Mid-West Development Company
Western Land & Timber Company

Public Service Company of Colorado

Cheyenne Light, Fuel & Power Company
Colorado-Wyoming Gas Company
The Eastern Colorado Power & Irrigation Co

The United Hydro Electric Company

Green and Clear Lakes Company

Federal Light & Traction Company

Albuquerque Gas & Electric Company
Deming Ice & Electric Company
Federal Realty Company
Hoh Boom & Driving Company
New Brunswick Power Company
New Mexico Power Company
Olympic Public Service Company

Queets Boom & Driving Company
Rawlins Electric Company
Sheridan County Electric Company
The Trinidad Elec.,Transm'n,Ry.& Gas Co.
The Tucson Gas, Elec. Light & Power Co.
Tucson Rapid Transit Company
Willapa Electric Company

Central Arkansas Public Service Corp.

Citizens Electric Company
Consumers Gas Company (Arkansas)
Hot Springs Street Railway Company
Hot Springs Water Company

Cowlitz Boom & Driving Company

Cascade Electric Company

Springfield Gas & Electric Company

Springfield Traction Company

Grays Harbor Railway & Light Company

Electric Service & Supply Company
North River Transportation Company
Twin City Transit Company
Electric Land Company

The Las Vegas Light & Power Company

The Las Vegas Transit Company

Western Washington Elec.Light & Power Co.

Loggers Boom & Driving Company

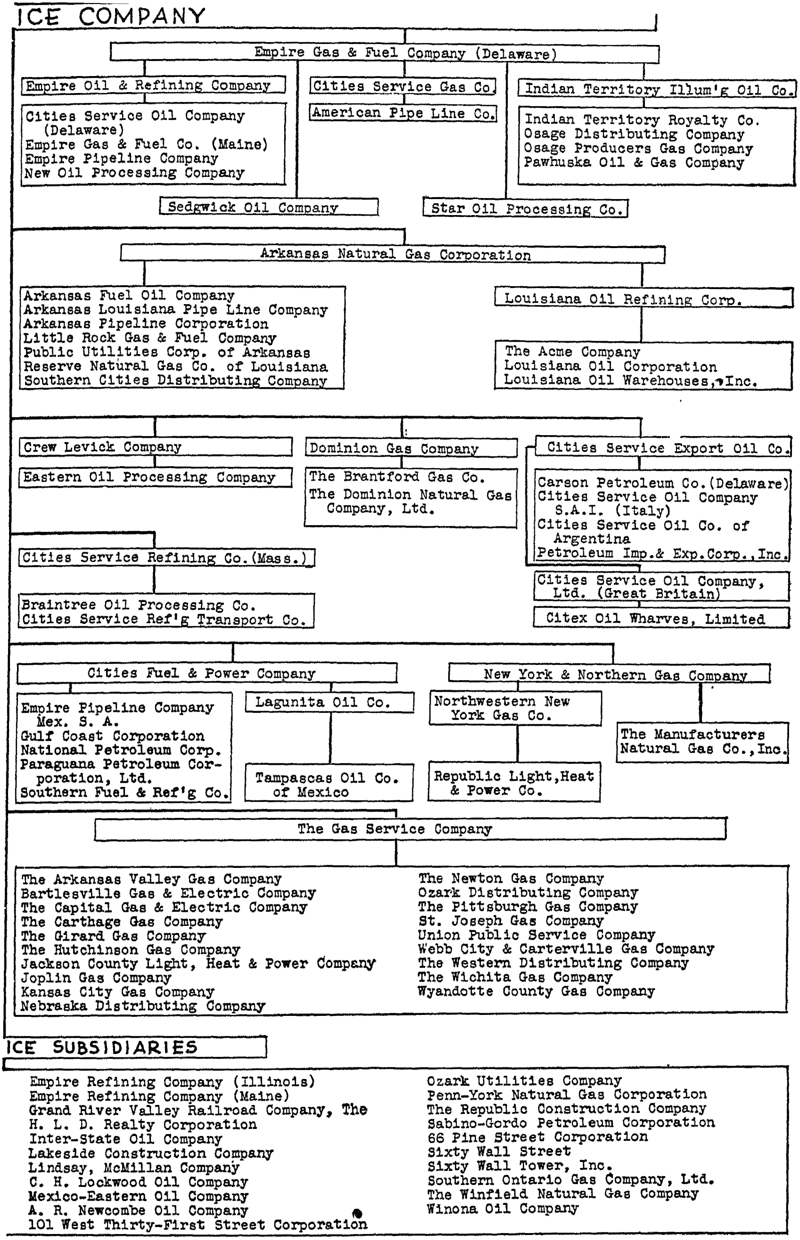
OTHER CITIES SERV-

Alberta Gas & Fuel Company, Ltd.
Auto Gas & Supply Company
Central Ohio Gas & Electric Company
Chesebrough Building Company
Cities Service Gas Pipeline Company
Cities Service Oil Company, Ltd. (Canada)
Cities Service Oil Company (Michigan)
The Cities Service Oil Company (Ohio)
Cities Service Petroleum Company, Ltd.
Cities Service Securities Company

Cities Service Tank Line Company
Cities Service Transportation Company
Cia. de Gas y Combustible "Imperio," S.A.,
Cia. de Terrenos Petroliferos "Imperio" SA
Cia. Emmex de Petroleo y Gas, S. A.
Cia. Terminal "Imperio," S. A.
Consolidated Cities Light, Power & Traction Company
Consumers Gas Company (Oklahoma)
Dokenva Gas Corporation
Empire Oil & Gas Company, Inc.

Figure 22. Cities

(Source: *Report on*



Service Company System
Pipe Lines, 1933)

securities. If there are no economies, the aggregate value of the securities is no greater, but the proportionate interests in the enterprise may be changed. Someone has gained; someone has lost.

Usually, considerable quantities of the securities of the consolidated enterprise are sold to the public. The public provides, through purchase of securities, all of the real investment in the properties. The securities held by the promoter represent the profits from the transaction. It is in this way that large fortunes have been made in promoting consolidations. Since the consolidation movement is financed by the public sale of securities, it is easy to see why most consolidations occur during boom times and fewest occur during depressions. When securities can be readily sold, consolidation flourishes; when they cannot be sold, it languishes. As in other instances, these statements will not hold for all cases. Some strongly financed companies buy competitors on the auction block during depressions. Some fusions are financed entirely by exchange of securities. But numerically these exceptions constitute only a mere fraction of the total.

Chicanery.—The social and economic angles of consolidations have been written about and debated for years. In some cases, the results have been pronounced satisfactory both from general social and from profit point of view. In others, they have not. Recently, much attention has been focused on the unethical practices of promoters and corporate managements. In this connection, it is well to observe that a criminal in a responsible position can steal or defraud regardless of whether the enterprise be large or small, simple or complex. However, chicanery assumes greater importance in consolidated enterprises than in simple corporations because the mere size of the institution gives greater power for evil. Further, the mere size gives greater opportunity to conceal facts and to perpetuate control. This condition follows from the fact that stockholdings of the large enterprise are usually greatly diffused, and the bulk of the ownership is absentee ownership. These matters are of great importance, but lie somewhat out-

side the scope of the present treatise. Nevertheless, they will be given some attention as occasion arises.

Some Common Terms.—For many years the terms *horizontal* and *vertical* have been applied to business combinations. Recently a new term, *circular,* has come into vogue. Horizontal combination indicates combination of establishments engaged in the same stage of the industrial process. For example, a combination of several oil refineries would be a horizontal combination. Vertical combination indicates the integration of different steps in the industrial process. Thus, the combination of oil well companies with pipe lines, refineries, and distributing facilities—giving single control to the whole process from the production of the oil to the sale of gasoline—would be vertical combination. To be vertical combination, the integration need not be complete; it is vertical if any two successive stages are combined. Circular combination indicates the welding together of concerns making noncompeting products but using the same distributing channels. To illustrate, General Foods Corporation is a combination of companies which sold Postum, Jell-o, Maxwell House Coffee, Baker's Chocolate, Minute Tapioca, and some lesser products. The force behind this type of consolidation is the economy of using a single large selling organization to handle all of the products.

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CHAPTER 18

DIRECT PROPERTY OWNING CONSOLIDATIONS

Only incidentally has the preceding chapter touched on the methods of consolidating corporations. Such methods may be classified into two groups: (1) consolidations by direct ownership of the properties, embracing amalgamation, merger, and sale of assets; and (2) consolidations by control of separately existing corporations, embracing stock control and leases. The present chapter deals with the technical nature and procedures of amalgamation, merger, and sale of assets.

Amalgamation.—*Amalgamation* is the combining of two or more corporations into a single new corporation having the rights, interests, property, and obligations of the constituent corporations. Usually stock in the new company is exchanged for stock in the old corporations, and the stockholders of the old companies become stockholders of the new. This process is also known as *statutory ~~consolidation.~~* However, financial writers use the term *amalgamation* in preference to the term *consolidation* to avoid the confusion which arises because *consolidation* is used in a broad sense to cover all types of binding unions of corporations as well as in the narrow sense indicated here. Amalgamation, in American usage, signifies only that type of union which results in the creation of a new corporation from two or more previously existing corporations. The constituent corporations pass out of the picture, ceasing their existence except in those few cases where they are continued as dormant entities by statute.[1] This method of consolidation

[1] In Ohio and Mississippi Railway Co. *v.* People, 123 Ill. 467, it was held that "the constituent corporations do not necessarily cease to exist although they lie dormant and their property rights, powers and franchises are possessed and exercised by the new consolidated corporation." However, "the general rule is that the consolidation effects the dissolution of the original corporations and brings into existence a new corporation possessed of the property, rights and franchises and assuming the liabilities of those passing out of existence." (6 *Am. & Eng. Ency. of Law,*—2d ed.—810; 10 *Cyc.* 302.) Whether or not the constituent corporation become dormant or totally extinct depends entirely upon the statute authorizing amalgamation.

is illustrated by the case of the amalgamation in 1917, of the Union Electric Light & Power Company (of St. Louis) with the Perry County Public Utilities Company to form an entirely new legal entity, likewise known as the Union Electric Light & Power Company. It should be noted that while the name of the succeeding corporation is identical with that of one of the constituents, the corporations are not the same. Legally the old Union Electric Light & Power Company ceased to exist, and a new company was created. This matter of creating an entirely new corporation from the old is the detail that distinguishes amalgamation from merger and sale of assets. The practical importance of this difference in law will be taken up later on in this chapter.

Merger.—When two or more corporations are united in such a way that one of them continues its existence and absorbs the other or others, the process of consolidation is designated as merger. The continuing corporation, in case of merger, succeeds to the rights, privileges, properties, and liabilities of the merged corporation, the merged corporation being dissolved in the process.[2] Uusually, stock of the absorbing corporation is exchanged for stock of the merged corporation in the merging process. Like amalgamation, merger is a statutory procedure consummated by filing the appropriate certificate with the secretary of state or other designated authority. It is carefully distinguished from amalgamation only in the statutes of New York (Section 85, Stock Corpora-

[2] It is merger that is actually authorized by the Act of November 7, 1918, Authorizing Consolidation of National Banks. This act reads as follows: "That any two or more national banking associations located within the same county, city, or village may, with the approval of the Comptroller of the Currency, consolidate into one association under the charter of either existing bank . . ." The comptroller of currency has interpreted the effect of this process as follows: "When the comptroller issues his certificate approving the consolidation of two or more national banks, the bank, other than that under whose charter the consolidation is effected, ceases to exist as a separate institution and its corporate powers are absorbed by the consolidated association, and such bank would, therefore, no longer have any corporate existence as such. The bank under whose charter the consolidation was effected would continue its existence as the same legal entity." (*Consolidations,* issued by the Office of the Comptroller of Currency. Washington, Government Printing Office, 1931.) This use of the term *consolidation* to cover various processes emphasizes the value of the term *amalgamation* for the purpose of indicating the process described in the preceding section.

tion Law). However, in numerous cases, the courts of other states have been forced to determine whether a new corporation was created or an old one continued. So the distinction is also well settled in other jurisdictions.

Significance of Distinction between Amalgamation and Merger.—The question of whether one of the old constituent corporations continues its existence or whether a new corporation is formed by a particular consolidation is of considerable practical importance. (1) In case of merger, the corporate organization of the absorbing corporation continues; in case of amalgamation, it does not. In the one case the by-laws, officers, and directors need not be affected; in the other they must be constituted anew. In the one case the duration of corporate life is not changed; in the other a new corporation with possibly a different span of life is set up. (2) In case of merger, the security holders of the absorbing corporation continue in their same relation to the corporation as previously; but those of merged or amalgamated companies lose such rights as were contingent on the continued existence of the dissolved corporations. Thus, after-acquired clauses in the mortgages of the dissolved corporations do not operate to bring property acquired by the successor corporation under their liens. Conversion privileges cease. Unissued portions of bond issues cannot longer be used to acquire additional property. (3) The continuing corporation in a merger pays original issue taxes only on additional stock issued; whereas the amalgamated corporation pays taxes on all issued stock because all is original. These matters, particularly those relating to creditor relationships and taxes, are very important in determining whether the amalgamation procedure or merger procedure will be used. In some cases amalgamations have been entered into directly for the purpose of closing liens and terminating the operation of after-acquired property clauses of mortgages.

Legal Requirements to Amalgamate or Merge.—The usual powers of a corporation do not include the power to amalgamate into a newly formed corporation or to merge into an

existing one. Specific authorization by statute is necessary, and full compliance with the statute must be made before a consolidation through either of these methods is complete. In the absence of statutory permission, the action of constituent corporations in consolidating by amalgamation or merger is *ultra vires* and can be enjoined by the state or by dissatisfied stockholders. In the majority of states today, however, amalgamation and/or merger is permitted expressly by statute, and in some states where no express provision exists, implied permission may be found. Such restrictions as exist in the statutes are usually designed to prevent the consolidation of corporations organized for unlike and non-ancillary purposes. In addition to these restrictions, consolidations of regulated corporations must have special approval. Thus consolidations of national banks must have the approval of the Comptroller of Currency; and consolidations of public utilities, the approval of public service commissions.

In a majority of the states, statutes also specify the requirements for stockholder ratification of consolidations by amalgamation or merger. The most common requirement is that the holders of two-thirds of the outstanding stock vote in favor of the consolidation; but there is no uniformity from state to state—the amounts varying from a mere majority of the votes cast to 100% of the stock outstanding. However, a large number of states make no provision on this subject. Hence, in these states unanimous consent is necessary.

Amalgamation Procedure.—The usual procedure in amalgamation is as follows: The directors of the various corporations involved agree upon the terms and conditions of the proposed consolidation. They must then call a meeting of the stockholders of each corporation, at which the stockholders are given an opportunity to express their opinions and vote upon the proposal. The holders of the required amount of stock must consent to the consolidation, and this consent must usually be put into writing to be filed along with other papers with the secretary of state. A written agreement is then executed, and the articles of the new corporation drawn up

according to the requirements of the particular state of incorporation. These articles, with the written agreement and the written consents of stockholders, must then be filed with designated authorities, usually the secretary of state and the local county recorder. The accompanying excerpt from the Stock Corporation Law of New York illustrates the general procedure:

SEC. 86. CONSOLIDATION. Any two or more corporations, organized under the laws of this state for the purpose of carrying on any kind or kinds of business which a corporation organized under article two of this chapter might carry on may be consolidated into a single corporation by the filing[3] of a certificate which shall be entitled and endorsed 'Certificate of consolidation forming the . . . , pursuant to section eighty-six of the stock corporation law' (the blank space being filled in with the name of the corporation formed by the consolidation) and which shall state:

1. The name of each corporation to be included in the consolidation, and the date of the filing of its certificate of incorporation in the office of the secretary of state, or, if any such corporation is created by a special law and has no certificate of incorporation, the chapter number and year of passage of such law.

2. The name of the new corporation.

3. Either the amount of the capital stock of the new corporation and the number and par value of the shares of which it is to consist, or, if the corporation is to issue shares without par value, the statements required by section twelve. If the shares are to be classified, the number of shares to be included in each class and all of the designations, preferences, privileges, and voting powers or restrictions or qualifications of the shares of each class.[4]

4. The city, village, or town and the county in which the office of the corporation is to be located.

5. The term of its duration.

6. The number of its directors, not less than three.

7. The names and postoffice addresses of the persons who are to be its directors until the first annual meeting of its stockholders. The number of the directors so named must be the number stated pur-

[3] "Fee of Department of State for filing, $20."

[4] "Tax to be paid department of state. The new corporation shall pay a tax only upon the excess of its capital stock or shares without par value over the aggregate tax paid by the corporations forming such new corporation. See section 180, *Tax Law.*"

suant to the last preceding subdivision of this section. If the address of any such director be in a city, the street and number or other particular description thereof.

8. The terms and conditions of the consolidation, if any; the mode of carrying the same into effect, and the manner of distributing the shares of the new corporation among the stockholders of the constituent corporations.

Such certificate shall be either:

a. Subscribed and acknowledged, in person or by proxy, by the holders of record of all the outstanding shares of each constituent corporation entitled to vote thereon, and shall have annexed an affidavit by the secretary or an assistant secretary of each corporation that the persons who have executed the certificate in person or by proxy, include the holders of record of all of the outstanding shares of such corporation entitled to vote thereon; or

b. Subscribed and acknowledged by the president or a vice-president and a secretary or an assistant secretary of each constituent corporation, who shall make and annex an affidavit stating that they have been authorized to execute and file such certificate by the votes, cast in person or by proxy, of the holders of record of two-thirds of the outstanding shares of such corporation entitled to vote thereon, and that such votes were cast at a stockholders' meeting held upon notice as prescribed in section forty-five of the stock corporation law to every stockholder of record of the corporation entitled to vote thereon, and the date of such meeting.

Such certificate shall be filed in the office of the secretary of state and a certified copy thereof shall be filed and recorded in the office of the clerk of the county in which the office of the new corporation is to be located, in the office of the clerk of each county in which a certificate of incorporation of a constituent corporation is filed and in the office of the clerk or register of each county of this state in which real property of a constituent corporation is situated.

If such certificate contains a statement in conformity with paragraph (B) of subdivision four of section twelve, the amount of the consideration received by the new corporation for the issuance of such of its shares without par value as are distributed in place of previously issued and outstanding shares with par value of the constituent corporations, shall be deemed to be the amount of the par value of such previously issued and outstanding shares, or if the actual value of such shares be less than their par value the consideration may be stated to be their actual value.

The aggregate par value of the shares with a par value of the new corporation distributed in place of previously issued and outstanding shares of the constituent corporations shall not exceed the aggregate value of the properties, franchises and rights of such constituent corporations.

Merger Procedure.—In those states which make statutory provision for mergers, with the exception of New York, the legal procedure is the same as that for consolidation. In New York, however, a separate procedure is prescribed for merging corporations which are controlled by 100% stock ownership. The pertinent part of the statute is as follows:

SEC. 85. MERGER. 1. Any domestic stock corporation or any foreign stock corporation authorized to do business in this state owning all the stock of any other domestic stock corporation organized for, or engaged in business similar or incidental to that of the possessor corporation, and any domestic stock corporation owning all the stock of any foreign stock corporation authorized to do business in this state and organized for, or engaged in business similar or incidental to that of the possessor corporation, may file in the office of the secretary of state a certificate of such ownership, in its name and under its corporate seal, signed by its president or a vice-president and its secretary or treasurer, and setting forth a copy of the resolution of its board of directors to merge such other corporation, and to assume all of its obligations, and the date of the adoption thereof. Thereupon all of the estate, property, rights, privileges and franchises of such other corporation, shall vest in and be held and enjoyed by such possessor corporation as fully and entirely and without change or diminution as the same were before held and enjoyed by such other corporation, and be managed and controlled by such possessor corporation, and, except as provided in subdivision three of this section, in its name, but subject to all liabilities and obligations of such other corporation and the rights of all creditors thereof. The possessor corporation shall not thereby acquire power to engage in any business or to exercise any right, privilege or franchise of a kind which it could not lawfully engage in or exercise under the provisions of the law by or pursuant to which such possessor corporation is organized.

2. The possessor corporation shall be deemed to have assumed all the liabilities and obligations of the merged corporation and shall be

liable in the same manner as if it had itself incurred such liabilities and obligations.

3. If the possessor is a domestic corporation it may relinquish its corporate name and assume in place thereof the name of the merged corporation by including a provision to that effect in the resolution of merger adopted by the directors and set forth in the certificate of ownership, and upon the filing of such certificate the change of name shall be complete with the same force and effect and subject to the same conditions and consequences as if such change had been accomplished by proceedings under the general corporation law. No corporation shall change its name under this section unless the name assumed contains some word or abbreviation clearly indicating that it is a corporation.

4. Any bridge corporation may be merged under this section with any railroad corporation which shall have acquired the right by contract to run its cars over the bridge of such bridge corporation.

5. If the possessor corporation is subject to the jurisdiction of the public service commission, the approval of the merger by such commission shall be endorsed on or annexed to the certificate of merger before filing.

(As amended by ch. 649, L. 1925.)

Form of Amalgamation Agreement.[5]—

This agreement and article of consolidation made the 9th day of September in the year 1903, by and between Missouri-Edison Electric Co., acting under and by authority of its board of directors, and by the direction and with the assent of the owners of more than three-fifths of the capital stock of said corporation, party of the first part, and Union Electric Light & Power Co., acting under and by authority of its board of directors, and by the direction and with the assent of the owners of more than three-fifths of all the capital stock of said last-named corporation, party of the second part, witnesseth:

Whereas Missouri-Edison Electric Co., said party of the first part is a corporation duly organized and existing under the laws of the State of Missouri for the purpose of manufacturing and supplying electricity and light, heat, and power for the use of the inhabitants of the city of St. Louis, Mo., and its environs and for the use of said city as appears more fully by its articles of incorporation now on file to which reference is hereby made, and,

[5] From *U. S. Senate Document 92*, 70th Congress, 1st Session, Parts 33 and 34, pp. 1171-1175. (Gov. Printing Office, Washington, 1932.)

Whereas Union Electric Light & Power Co., said party of the second part, is a corporation duly organized and existing under the laws of the State of Missouri for the purpose of manufacturing and supplying electricity and light, heat, and power for the use of the inhabitants of the city of St. Louis, Mo., and its environs, and for the use of said city, as appears by its articles of incorporation now on file, to which reference is hereby made, and,

Whereas the parties hereto are both corporations organized and created solely for manufacturing purposes and their objects and business are in general of the same nature, and

Whereas the parties hereto are desirous of amalgamating, uniting, and consolidating, upon the terms and conditions hereinafter set forth to form one consolidated corporation under the name and style of Union Electric Light & Power Co., in pursuance of the provisions of the Revised Statues of the State of Missouri of 1899, chapter 12, article 9, section 1334, holding and enjoying all of the rights, privileges, power, franchises, and property belonging to each of the parties hereto, and

Whereas Missouri-Edison Electric Co. has issued preferred stock to the amount at par value of $2,000,000 and common stock to the amount at par value of $2,000,000, and

Whereas Union Electric Light & Power Co. has issued preferred stock to the amount at par value of $2,000,000 and common stock to the amount at par value of $8,000,000, and

Whereas the board of directors of each of the parties hereto and the owners of at least three-fifths of the capital stock of each of the parties hereto have authorized and assented to making of such consolidation under the terms and conditions herein set forth;

Now, therefore, for the purpose of effecting such amalgamation, union, and consolidation and prescribing the terms and conditions thereof, Missouri-Edison Electric Co., party of the first part, and Union Electric Light & Power Co., party of the second part, do hereby, under their respective corporate seals, mutually agree and covenant as follows:

First. The parties hereto hereby accept the provisions of article 9 of chapter 12 of the Revised Statutes of the State of Missouri of 1899, and all supplements or amendments thereto.

Second. Missouri-Edison Electric Co. and Union Electric Light & Power Co. shall be and they are hereby amalgamated, united, and consolidated into one corporation, under the name and style of Union Electric Light & Power Co.

Third. The business of the said Union Electric & Power Co. shall be conducted in the city of St. Louis, Mo., and its environs.

Fourth. The amount of the capital stock of the said Union Electric Light & Power Co. shall be $10,000,000, and shall be divided into 100,000 shares of the par value of $100 each. . . .

Fifth. The shares of the consolidated Union Electric Light & Power Co. issued in consideration of the acquisition by said consolidated company of all the property of whatsoever description of said Missouri-Edison Electric Co. and said Union Electric Light & Power Co. (as heretofore existing) shall be distributed as follows, namely, 1 share of stock of said consolidated company (10,000 shares in all) and $5 shall be exchanged and given for every 2 shares of the preferred stock of said Missouri-Edison Electric Co. [etc.]

Sixth. The names and places of residence of the said several shareholders of the said consolidated Union Electric Light & Power Co., and the number of share allotted to each under and pursuant to the terms of this agreement as appears from the stock books of said two companies and, therefore, subscribed by each, are as follow: . . .

Seventh. That Union Electric Light & Power Co., as consolidated, shall hold and enjoy, and is hereby vested with all the rights, privileges, power, franchises, and property heretofore belonging to either or both of the parties hereto, and each of the parties hereto does hereby assign, grant, transfer, sell, and set over unto the said Union Electric Light & Power Co., as consolidated, all and singular its rights, privileges, power, franchises, and property of whatsoever nature and wheresoever situated.

Eighth. The number of directors who shall manage the affairs of said Union Electric Light & Power Co. shall be 10. The names and post office addresses of the directors of the said Union Electric Light & Power Co. for the first year after consolidation are as follows: . . .

Ninth. The term of existence of the said Union Electric Light & Power Co. shall be until May 20, 1952.

Tenth. The object, purposes, and business of the said consolidated company shall be those of the said Missouri Electric Co. and the said Union Electric Light & Power Co. (as heretofore existing) or either of them, namely: To operate wires, tubes [etc.], to make with said city of St. Louis and its inhabitants and the inhabitants of its environs and all other persons, all contracts and agreements that may be necessary or convenient for any of the objects or purposes aforesaid; to buy, sell, lease, mortgage, or rent any real or personal property necessary, proper, or convenient for said objects; to accept, hold,

assign, sell, or mortgage, rent, purchase, or otherwise acquire, deal with, or dispose of all licenses, franchises, privileges, or rights, public or private, that may be essential, convenient, or proper for the accomplishment of the objects and purposes aforesaid.

All indebtedness of the consolidating corporations or of either of them shall be assumed and it hereby is assumed and shall be paid by the said Union Electric Light & Power Co. after such consolidation.

In testimony whereof said parties of the first and second parts have caused this agreement to be executed in duplicate by their respective presidents and have caused these presents to be signed by each member of their respective boards of directors and have caused the corporate seals of the respective corporations to be hereto affixed and these presents to be attested by their secretaries at said city of St. Louis, this 9th day of September, 1903.

Missouri-Edison Electric Co.,

By——— ———, President

——— ———,

——— ———,

Directors of Missouri-Edison Electric Co.

Attest: Secretary of Missouri-Edison Electric Co.

Union Electric Light & Power Co.,

By——— ———, President

——— ———,

——— ———,

Directors of Union Electric Light & Power Co.

Attest: Secretary of Union Electric Light & Power Co.

Transfer of Individual Assets.—The acts necessary to transfer individual properties to the consolidated company will vary according to the laws of the various states. In New York all properties of amalgamated companies vest in the consolidated company automatically by operation of law, the following section of the New York Stock Corporation Law being particularly full in this respect:

SEC. 89. TRANSFER OF PROPERTIES OF CONSTITUENT CORPORATIONS TO CORPORATION FORMED BY CONSOLIDATION. Upon the filing of such

certificate of consolidation in the office of the secretary of state all the rights, privileges, franchises and interests of each of the constituent corporations, and all the property, real, personal and mixed, and all the debts due on whatever account to either of them, as well as all stock subscriptions and other things in action belonging to either of them, shall be taken and deemed to be transferred to and vested in such new corporation, without further act or deed; and all claims, demands, property and every other interest shall be as effectually the property of the new corporation as they were of the constituent corporations, and the title to all real estate, taken by deed or otherwise, under the laws of this state, vested in either of such constituent corporations, shall not be deemed to revert or be in any way impaired by reason of the consolidation, but shall be vested in the new corporation.

In many other states statutes do not provide for such complete transfers, and individual assets must be transferred in the manner prescribed by law. Real property is transferred by deed; personal property by assignment or bill of sale. Bank balances are transferred by check, and all negotiable papers must be indorsed over to the new company. Insurance policies, contracts, etc., must be properly assigned to the new company. Proper exchange of stock and other securities of the consolidated corporation, for stock and other securities of the constituents under the consolidation agreement, must be made. When all this has been done, the consolidation is complete.

Sale of Total Assets.—By *sale* is meant *transfer for a consideration.* The consideration may be cash, securities, or cash and securities.[6] So defined, sale of the total assets of one

[6] A theoretical distinction, which has found favor with some economists and in some cases with the courts, would preclude classing a sale for stock in the purchasing company as a sale. This distinction is based upon the contention that a sale implies a termination of the interest of one of the parties in the property which is transferred. A merger implies a union of interests in the property and therefore is something more than a sale. When stock of the purchasing corporation is distributed to the shareholders of the selling corporation, there is in effect a union of interests. The stockholders of the vendor retain an interest in the combined properties, and hence, in essence, there is a merger. However, clear distinctions are not made in legal definitions. The courts in general treat the specified transaction as a sale of assets—even though the effect is the same as that of a merger—and confine the usage of *merger* to a consolidation under the statutes authorizing merger. In many cases the words *merger, sale of assets,* and *consolidation* are used indiscriminately; therefore it is impossible to attribute any definite usage to these words in legal parlance.

corporation to another corporation is a very common method of effecting consolidations. There are many reasons for preferring it to amalgamation or merger. One company may be so small that merging or amalgamating would be unduly expensive. Imagine New England Telephone and Telegraph Company amalgamating with a $10,000 rural telephone company. The companies may be organized under the laws of different states with no provision in the statutes for merging or amalgamating with foreign corporations. The selling company may desire to terminate its interest in the corporate properties and hence avoid an exchange of stock. Statutory requirements for sale of assets may be more easily met than those dealing with amalgamation and merger. Minority obstruction to the consolidation may be more easily overcome, especially in cases where the selling corporation is insolvent.[7]

Distinction Between Sale of Assets and Merger.—Some writers use the terms *sale of assets* and *merger* to cover essentially the same thing. There are, however, some differences between the two in the eyes of the law, albeit the economic result may frequently be the same. When one corporation is merged into another, the absorbing corporation generally acquires the powers of the absorbed corporation in addition to the powers which it already possesses.[8] In a sale of assets, on the other hand, only title to the property is transferred, not the corporate powers possessed by the selling corporation. Another difference lies in the fact that if there is a merger, the selling corporation passes out of existence,[9] and becomes merged into the absorbing corporation. If assets are sold, the selling corporation may remain in existence as a legal entity, although in practice it usually dissolves.

Legal Requirements for Sale of Total Assets.—In the absence of express restrictions, business corporations have the

[7] Sale of assets may be used for purposes other than consolidation. Thus it may be used as a means of reincorporation or of recapitalization.

[8] In some cases, *e.g.*, in Pennsylvania, a corporation with unlike powers cannot be merged without first divesting itself of the unlike powers. *Cf.* York Haven Water & Power Co. *v.* P. S. Com. of Pennsylvania, P. U. R. 1927 A, 809.

[9] In some cases of merger under special acts of legislatures, the merged corporations were kept alive to permit creditors to enforce their claims.

implied power to convey any or all of their real or personal property. But quasi-public corporations must have legislative authority, since such sale would disable them from performing their public duties. In the case of such companies, each separate consolidation is usually subject to approval of a designated commission or public officer.

With respect to stockholder authorization, however, the requirements for sale of total assets are usually the same as for amalgamation or merger except in the cases of financially embarrassed corporations. In the absence of statutory or charter provisions, by weight of authority, unanimous consent of the holders of the outstanding stock is required. Statutes of nearly half of the states make provision for sale of the total assets of a corporation by less than unanimous consent. Usually, the percentage of stock required for approval is the same for sale of total assets as for amalgamation or merger. The most common requirement is 66⅔%, although the requirements range from a bare majority to 100%. Financially embarrassed corporations may sell their entire assets with the approval of a mere majority of the stockholders.

The purchasing company requires neither statutory nor stockholder authorization to acquire the assets of another company.

Procedure for Sale of Total Assets.—The procedure for selling the total assets of a corporation is very similar to that for amalgamating two or more corporations. The directors of the two corporations agree upon the terms and conditions of the proposed sale. The officers of the selling corporation then call a stockholders' meeting at which the stockholders are given an opportunity to discuss and vote upon the proposal. If the holders of the required amount of stock consent to the terms of the sale, a written agreement is executed, and the individual assets are transferred in the manner prescribed by law. After the assets have been transferred, the selling corporation ordinarily distributes the proceeds of the sale to its security holders and dissolves; but in some cases the corporations have been kept alive. Thus Adams Express Company (a joint stock association) continued in existence as an investment trust.

The following extract from the minutes [10] of a meeting of the Board of Directors of St. Paul and Kansas City Short Line Railroad Company held February 9, 1932, illustrates the general procedure:

The following resolution was then unanimously adopted:

RESOLVED. That, subject to the assent and approval of the stockholders of this Company, and subject to the approval of the Interstate Commerce Commission, this Company sell and convey to the Chicago, Rock Island and Pacific Railway Company its entire railway and other property and franchises of every kind and nature; the consideration for such sale to be the assumption by said Chicago, Rock Island and Pacific Railway Company of the entire funded and other indebtedness and obligations of this Company as of the date of consummation of said sale, and such other or additional consideration as may be agreed upon with said Chicago, Rock Island and Pacific Railway Company and approved by the Interstate Commerce Commission: and, upon approval of said sale and conveyance by the stockholders of this Company and by the Interstate Commerce Commission, the proper officers of the Company be and they hereby are authorized and directed to execute and deliver to the Chicago, Rock Island and Pacific Railway Company a deed of conveyance to said properties.

The sale and conveyance hereby authorized are subject to the lien of the First Mortgage of St. Paul and Kansas City Short Line Railroad Company to Bankers Trust Company, as Trustee, dated February 23, 1911, securing the issue of 4½% First Mortgage Gold Bonds, due February 1, 1941, authorized to be issued to the aggregate face amount of $30,000,000, of which $16,520,635 have been issued and are now outstanding.

RESOLVED. That a special meeting of the stockholders of the Company be called to be held at the principal office of the Company in the City of Des Moines, Iowa, at 11 o'clock in the forenoon, on the 22nd day of April, 1932, for the purpose of considering the sale and conveyance of this Company's properties as aforesaid; and the proper officers of the Company are authorized to give due notice of said meeting, by mail and by publication, as required by the by-laws and by any provisions of law applicable thereto.

RESOLVED, That, upon the assent and approval by the stockholders of the sale and conveyance hereby authorized, J. E. Gorman, Presi-

[10] Interstate Commerce Commission, *Finance Docket 9410*. Application of Chicago, Rock Island and Pacific Railway Co., *et al.*, May 17, 1932.

dent, or Marcus L. Bell, Vice President, of this Company, or either of them is hereby authorized to prepare, sign, verify and file with the Interstate Commerce Commission, an application, on behalf of this Company, either separately or jointly with the Chicago, Rock Island and Pacific Railway Company, for an order approving the sale and conveyance of the railway and other properties of this Company to the Chicago, Rock Island and Pacific Railway Company, upon the terms and conditions herein authorized, or upon such other terms and conditions as shall be approved by the Commission; and to make like application to any other commission or commissions, or other governmental bodies, whose approval may be deemed necessary; and to execute and deliver, file and record all such documents, deeds, instruments, conveyances and certificates as may be necessary or requisite in the premises.

Agreement for Sale of Assets.[11]—

The Electric Co. of Missouri,
Webster Groves, Mo.

Dear Sirs: The undersigned hereby submits to your company a proposition to purchase all of its property, real and personal, and all of its assets of whatsoever kind, together with all of its contracts, rights, franchises, privileges, immunities, and book accounts, and to deliver to you or your nominees in consideration therefor securities of this company as follows:

Principal amount of bonds issued under refunding and extension mortgage of Union Electric Light & Power Co. to Bankers Trust Co. and Breckinridge Jones, as trustee, dated May 1, 1908, and indenture supplemental thereto, dated Jan. —, 1917	$1,600,000
Par value of 7% noncumulative preferred capital stock	1,000,000
Par value of common capital stock	600,000

The sale here contemplated does not, however, include the stock held by the Electric Co. of Missouri in the Union Electric Light & Power Co., which it acquired in exchange for stock of the Perry County Public Utilities Co. upon the consolidation.

The Electric Co. of Missouri is to discharge and cancel the bonded indebtedness, secured by mortgage given to trustee, dated February 1, 1913, but all other liabilities of the Electric Co. of Missouri are to be assumed and paid by the Union Electric Light & Power Co. as part of the purchase price for said assets.

[11] *U. S. Senate Document 92,* 70th Congress, 1st Session, Parts 33 and 34, p. 1196. (Government Printing Office, Washington, 1932.)

It is expressly provided that the foregoing proposal is made as a unit and an entirety, and is not severable in any respect, and is made subject to the approval of the Public Service Commission of Missouri.

This proposal shall remain open to acceptance for a period of 60 days from the date hereof.

Union Electric Light & Power Co.,

By ——— ———, Vice President.

Accepted.

The Electric Co. of Missouri,

By ——— ———, Vice President.

Deed Conveying Total Assets of a Corporation.[12]—

This indenture, made and entered into this 5th day of December, 1907, by and between the Laclede Power Co. of St. Louis, a corporation organized and existing under and by virtue of the laws of the State of Missouri, party of the first part, and the Union Electric Light & Power Co., a corporation organized and existing under and by virtue of the laws of the State of Missouri, party of the second part, witnesseth:

That the said party of the first part, in consideration of the sum of one dollar ($1) and other valuable considerations to it paid by the party of the second part, the receipt of which is hereby acknowledged, does by these presents grant, bargain, and sell, convey, and confirm, unto the party of the second part, its successors and assigns, the following described lots, tracts, or parcels of land, lying, being, and situated in the city of St. Louis and State of Missouri, to wit:

Section One: Lots 2, 3, and 4, of block 226 of the said city of St. Louis, and part of lot 1 of said block 226, described as follows: . . . [*Here follows a long series of technical descriptions of parcels of real estate owned by the corporation.*]

To have and to hold the premises aforesaid, with all and singular the rights, privileges, appurtenances, immunities, and improvements thereto belonging, or in anywise appertaining, unto the said party of the second part, and unto its successors and assigns forever; the said party of the first part hereby covenanting that it will warrant and defend the title to the premises firstly, secondly, and fourthly above

[12] *U. S. Senate Document 92,* 70th Congress, 1st Session, Parts 33 and 34, pp. 1194-1195. (Government Printing Office, Washington, 1932.)

described unto the said party of the second part and unto its successors and assigns forever against the lawful claims and demands of all persons whomsoever.

And in consideration aforesaid, the party of the first part does hereby sell, assign, transfer, convey, and confirm unto the said party of the second part, its successors and assigns, each and every article and thing now owned and possessed by it of any nature whatever and wherever situated; each and every contract it now has with persons and corporation in the city of St. Louis, Mo., for the use of electrical energy for any and every purpose; each and every account, bills receivable, and choses in action it now has against any person or corporation whomsoever, and the right to sue thereon; all moneys on hand and that may be due the party of the first part from any person or source whatever; all rents, profits, inventions, patents, rights, licenses, and franchises of every kind, name, and nature now owned by the party of the first part, the party of the first part intending and meaning hereby to convey absolutely unto the said party of the second part not only the real estate hereinabove described and all the right, title, and interest of the party of the first part therein, but as well all the other property, rights, and assets of the party of the first part of every kind whatsoever now held and owned by it in, or in connection with, its business of generating and supplying electric light and power or otherwise, and all contracts therefor, and all accounts, bills receivable, and choses in action thereunder or arising from any source, and all moneys on hand or to become due the party of the first part, and all rents, profits, inventions, patents, licenses, franchises, and privileges of every kind now owned by the party of the first part, as fully and to the same effect as if the same were herein specifically designated and described.

In witness whereof, the said party of the first part has caused these presents to be executed in its behalf by its president and its corporate seal to be hereto affixed, attested by its secretary, the day and year first above written.

The Laclede Power Co. of St. Louis.

(Seal) By E. V. Matlack, President.

Attest:

Horace W. Beck, Secretary.

Rights of Creditors upon Amalgamation or Merger.— Since amalgamation and merger ordinarily work the dissolu-

tion of the amalgamated or merged corporations under the statutes which authorize the procedure, such statutes usually make provision for the creditors of the absorbed companies. Thus the New York Stock Corporation Law provides:

> SEC. 90. Rights of CREDITORS OF CONSOLIDATED CORPORATIONS. The rights of creditors of any corporation that shall be consolidated shall not in any manner be impaired, nor shall any liability or obligation due or to become due, or any claim or demand for any cause existing against any such corporation or against any stockholder thereof be released or impaired by any such consolidation; but such new corporation shall be deemed to have assumed and shall be liable for all liabilities and obligations of each of the corporations consolidated in the same manner as if such new corporation had itself incurred such liabilities or obligations. The stockholders of the respective corporations consolidated shall continue subject to all the liabilities, claims and demands existing against them as such, at or before the consolidation; and no action or proceeding then pending before any court or tribunal in which any corporation that may be consolidated is a party, or in which any such stockholder is a party, shall abate or be discontinued by reason of such consolidation, but may be prosecuted to final judgment, as though no consolidation had been entered into; or such new corporation may be substituted as a party in place of any corporation so consolidated, by order of the court in which such action or proceeding may be pending.

Because the statutes vary, no general rule can be laid down that will apply to all cases. However, generally, the creditors of the absorbed companies become creditors of the consolidated company; but under some circumstances constituent corporations are continued in existence for the purpose of enforcing the claims of creditors. In the latter case any claims proved against the constituent are paid from property of the constituent, which is now in the hands of the consolidated company.

In the absence of statutory provision for creditors, it has been held that the consolidated company is liable for the obligations of the constituent companies. Further, the prevailing view in such cases is that the liability of the consolidated company is not limited to the amount of the property received.

Under these rulings the creditor can bring suit directly against the consolidated corporation. However, this is not his only remedy; he may follow the property into the hands of the consolidated company and subject it in equity to the payment of his claims. This right exists even though the articles of amalgamation or merger expressly provide to the contrary. However, in the absence of fraud, any lien placed upon the property by the consolidated company will take precedence over unsecured claims of creditors of the absorbed company or companies. This right of the consolidated company to place valid liens upon the property follows from the fact that it has succeeded to all of the rights of the constituents, among which is the right to mortgage the property. It should also be added that the property must be identified if it is to be followed. For certain classes of property, identification is a minor problem; but after a lapse of a few years, it may be impossible to identify considerable amounts of personal property or its proceeds.

From the foregoing discussion it is seen that there are four distinct factors affecting the position of the creditors of absorbed companies: (1) the consolidated company is liable, (2) the liens upon specific properties are preserved, (3) the creditors have the right to follow the property of the absorbed company and have it applied, in equity, to the satisfaction of their debts, and (4) subsequent liens placed upon the property by the consolidated company rank ahead of unsecured claims of constituents.

Position of Creditors on Sale of Total Assets.—The legal relations of creditors of the purchasing corporation to the corporation are not disturbed by the purchase of another business, albeit the value of their claims may be affected favorably by a wise, or unfavorably by an unwise, purchase.

On the other hand, the position of creditors of the selling corporation may be considerably changed. Their position may be considered under three sets of conditions: (1) when obligations have been expressly or impliedly assumed by the purchasing corporation, (2) when statutes or charters provide for

automatic assumption, and (3) when no expressed or implied assumption exists.

1. When a purchasing corporation has expressly assumed the debts of the selling corporation, creditors of the selling corporation can recover at law from the purchasing corporation, even though they have not assented to the change. Further, in case of insolvency of the purchasing corporation, general creditors whose debts have been assumed have a preferred claim against the purchased property unless they have released the original debtor. Their claim ranks ahead of the claims of other general creditors of the purchasing corporation.

2. When statutes or the charter, authorizing a corporation to acquire the property and franchises of another corporation, expressly provide that the purchasing corporation shall be liable for the debts of the selling corporation, such debts are automatically assumed at the time of purchase.

3. When a purchasing company does not expressly or impliedly assume the debts of the selling corporation, a number of situations may arise. The general rule is that a corporation which has succeeded, by a valid purchase and transfer, to the assets of another corporation, is not liable for the general debts of the other corporation. However, the creditors can proceed against the selling corporation; or, if the consideration has been paid directly to the stockholders, they may recover from stockholders who had knowledge of the unsatisfied claims.

If specific recorded liens or mortgages lie against the property, the purchasing corporation takes the property subject to the liens or mortgages, even though it be a *bona fide* purchase for value without actual notice of the incumbrance. The fact that the liens are recorded furnishes sufficient legal notice.

These rules cover ordinary situations. However, when the transfer is fraudulent or when it results in a mere continuation of the old company under a new name, creditors may follow the property and secure equitable relief.

Suggested Method of Limiting Liability of Purchaser.— Because the law is not clear in many jurisdictions, concerning

what constitutes a valid sale releasing the purchasing corporation from liability for the selling corporation's debts, the following procedure is suggested as a means of obviating liability.

The procedure is simply this: Fix as one of the terms of the purchase agreement the requirement that the selling corporation forthwith dissolve. In the dissolution proceedings the rights of all creditors would be protected.

After-Acquired Property Clauses.—Ordinarily an after-acquired property clause covers only such property as is acquired by the mortgagor corporation *itself* subsequent to the execution of the mortgage. However, statutes or the contract of consolidation itself may provide that a consolidated or purchasing corporation must assume the obligations of the mortgage. In such cases the after-acquired property clause continues to operate against property acquired by the new corporate owner. In absence of direct contract or statutory stipulations, however, amalgamation terminates the operation of after-acquired property clauses of constituent companies; merger terminates the operation of after-acquired property clauses of the merged, but not of the merging, corporation; and purchase of total assets terminates the operation (with respect to the property purchased) of the after-acquired property clauses of the selling, but not of the purchasing, corporation.

It is customary for consolidated companies to close the mortgages of constituent companies and to make further issues of bonds under a new consolidated mortgage, even though the old mortgages permit financing by a successor. This practice is followed because securities can be sold on a lower yield basis if they are brought out in sizeable issues and are secured by large, diversified properties. In some cases, the opportunity of securing a less restrictive mortgage covenant is also a factor in causing the closing of the mortgages of constituents. Indeed, some amalgamations have been promoted primarily for the purpose of closing the mortgages of important constituent companies.

Disposal of Assets Not Entering the Consolidation.— Since the constituents in an amalgamation and the merged corporations in a merger ordinarily go out of existence when the consolidation takes place, it is necessary to provide some legal device for the holding and liquidation of any assets which are not to be conveyed to the consolidated company. Two devices are commonly used: (1) the trust and (2) the corporation. (1) If the process of liquidating the assets promises to be involved, the Massachusetts trust is to be preferred to the simple trust. The superiority of the Massachusetts trust over the simple trust lies in the fact that it gives more flexibility in meeting the problems of a long period of liquidation. This type of organization is formed by setting up (by means of a deed of trust) a business estate under the management of a board of trustees. The beneficial ownership of the trust estate is evidenced by participation certificates. (2) Use of the corporation involves merely the organizing of a new company to which the old company conveys the assets that are to be segregated prior to the consolidation. The procedure is aptly illustrated by the following quotation:[13]

PRO-PHY-LAC-TIC BRUSH CO.—*To Vote on Reorganization.*—

A special meeting of stockholders has been called for Feb. 19 to approve a reorganization entered into with the Lambert Co. The agreement contemplates the transfer to P. B. Corp., a Delaware corporation formed by Pro-phy-lac-tic, of certain cash and miscellaneous assets of Pro-phy-lac-tic in exchange for all the capital stock of P. B. Corp., viz., 10,000 shares of no par common stock, and the assumption of certain liabilities, and the distribution of the 10,000 shares of common stock of P. B. Corp. pro rata among the holders of Pro-phy-lac-tic common stock.

It is expected the value of the assets to be transferred to the P. B. Corp. will be about $5 a share on Pro-phy-lac-tic common. The policy of the P. B. Corp., the management of which will be substantially identical with Pro-phy-lac-tic, will be to make in the near future a substantial distribution in cash to stockholders, and from time to time thereafter to make additional liquidating distributions in cash as the assets to be transferred are gradually disposed of.

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[13] *Commercial and Financial Chronicle,* Vol. 130, p. 1127, February 15, 1930.

Some of these assets, it is expected, can be liquidated within a comparatively short time; others will require a longer period.

The question may be raised, "Why not transfer the assets to the consolidated corporation and leave the miscellaneous assets in the hands of the old company?" The answer is that this method is available only in case the consolidation is to be effected by a sale of assets since the absorbed corporations are automatically dissolved in cases of merger or amalgamation. Thus such a procedure is limited to the restricted number of situations in which the sale of assets method is superior to other methods; and since the cost of segregating assets is usually a minor consideration in choosing between sale of assets on the one side and amalgamation or merger on the other, segregation becomes a secondary problem to be solved after the method of consolidation has been chosen. Segregation is used ordinarily for two purposes: (1) elimination of undesirable assets and (2) to even up the relative positions of different companies entering into the consolidation. Assets ordinarily prove undesirable either because they are valuable only in a branch of production that the consolidated company does not intend to pursue or because they are unsound. Lack of soundness is an especially common cause of segregating assets in bank consolidations. Evening up of relative positions is usually accomplished by a cash distribution to stockholders before the consolidation plan is put into effect. However, if cash cannot be spared, other assets may be withdrawn and held for the benefit of the stockholders of the constituent company.

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CHAPTER 19

NEGOTIATING THE CONSOLIDATION

Legal procedures and detail are only a means to an end. The ultimate goal is to set up the new economic unit under a single financial structure. It is this latter problem that gives rise to the greatest difficulties in promoting consolidations. Setting up a single financial structure and bringing several constituents under it are difficult, primarily because they involve complicated valuation problems. The financial structure consists of securities and claims which evidence interests in the property. The securities and claims are stated in terms of values and are compared from time to time in terms of values. Therefore, the problem is essentially one of assigning values to corporate resources. Such values are important for two reasons: (1) they provide the basis for issuing securities, and (2) they provide the basis for allotting the securities finally among the security holders of constituent companies. This chapter deals with the economics of the valuation process and the problems that arise in allotting securities to the various parties to the consolidation.

Methods of Valuing Industrials.—There are three common approaches to the valuation of industrial corporations. These approaches may be designated as the asset, the earnings, and the market value of securities approaches. Fundamentally they are all ultimately grounded in earning power, but as valuation techniques they proceed along different routes. Hence, each approach is discussed in detail.

The Asset Approach.—The asset approach for valuing going concerns is a common one among accountants. It proceeds by valuing tangible assets and good will as separate groups and then summing the two groups.

The steps in this method may be listed as follows:

1. Find the value of tangible assets less current liabilities.
2. Estimate the average future earnings.
3. Determine a normal rate of return on net tangible assets.
4. Find the amount of normal return on net tangible assets.
5. Deduct the amount of normal return on net tangible assets from the estimated earnings.
6. Capitalize the remaining or excess earnings to determine the value of the intangibles.
7. Sum the figures for net tangibles and intangibles.

EXAMPLE

Net tangible assets	$100,000
Normal rate of return	7%
Normal amount of return	$7,000
Average future annual earnings	$20,000
Less normal return on tangible assets	7,000
Excess earnings	$13,000
Rate for capitalizing intangibles	26%
Value of intangibles	$50,000
Add net tangible assets	100,000
Total value of going concern	$150,000

It is to be noted that the results of this method, despite the rigidity of the figures, are speculative and approximate at best. Asset values, future earnings, and rates of return and of capitalization are but estimates which may or may not materialize. A brief breakdown of the difficulties attending this process will demonstrate the point. However, in classifying the assets, it will be well to divide net tangible assets into two classes: Namely, (1) current assets and (2) fixed assets, and to substitute the term "intangibles" (as was done in the example) for the term "good will." The latter change is made because the process for determining the value of good will actually finds the aggregate value of all intangibles including such organization and management resources as are not compensated for in operating expenses.

Current Assets.—Current assets (working capital) can be valued with little difficulty. These assets consist of cash, receivables, inventories, and similar items that can be converted

into cash within a year. The cash item can be taken at its face value if deposits are in a sound bank; the collectible value of accounts and notes receivable can be determined with satisfactory approximation by a brief survey; and marketable securities, finished goods, and raw materials can be appraised in terms of existing markets. Only goods in process, thinly traded securities, and similar items for which there are no dependable markets offer objectionable difficulties. But since these are usually valued in terms of a going enterprise, even they can be appraised with ample exactness for the consolidation process.

Fixed Assets.—The distinguishing characteristic of fixed assets is that they are consumed in producing other goods rather than consumed directly. They are made and wanted because of their ability to produce other goods. Their value is, therefore, determined by the amount that they will contribute to the value of other goods over their productive life. Strictly speaking, the values that they will contribute at different periods during their lives are discounted to find their present worth. That is, the product of capital instruments should be sufficient to pay for capital destroyed in the productive process and to pay interest on capital during the period in which it is locked up. It is well to dwell upon the fact that the value of capital instruments is to be found in their future product because much false reasoning has centered around this point in recent years. In numerous cases public utility engineers have testified that properties should be valued at 85% or 90% of their cost of reproduction new because they were rendering current service at that standard of engineering efficiency. It takes little intelligence to see that an asset that will produce a given annual output for five years is worth less than an asset that will produce the same annual output for ten years, but nevertheless this spurious doctrine of valuation has had great persistence.

The theory of valuation itself is relatively simple. It is in applying the theory that one meets difficulties. Future output, sales prices, and costs are, at best, speculations. In addition,

it is difficult to say what part of the value added to raw materials in the manufacturing process is attributable to fixed assets, to working capital, to management, and to innumerable intangible elements, since no element is operating without aid of the others. In practical procedures rough methods are common. Thus in valuing fixed assets, reproduction costs, standard depreciation rates, and so-called normal rates of return may be used to obtain approximate results. The theory is that no individual asset is worth more than the cost to reproduce it. In the case of freely and immediately reproducible assets this is true. But in the case of assets that can be completed only after the lapse of a considerable period of time a scarcity may temporarily raise values above the reproduction cost point. With this qualification, it may be said that reproduction cost sets the upper limit to the value of capital instruments. Below this limit, value will be set by earning capacity or productivity. Thus, if an asset is earning a normal return on its investment, it is valued at reproduction cost diminished by an amount based on the expired portion of its productive life. If it is earning less than a normal return, it is valued at the present worth of the future incomes over its unexpired life, discounted at the normal rate of return.

Intangible Assets.—Intangible assets include a vast number of factors which defy exact valuation. Organization, routine procedures, machinery for executive control, advantages forged by costly experience, continuing managerial ability made permanent through the understudy system, trained forces of technical operatives, favorable employee relationships, systems of accounting and statistical control, comparative standards for measuring efficiency, trade agreements, favorable contracts for purchasing materials and supplies, established connections, customer good will based on reputation for fair dealings, quality, punctuality of shipment, solvency, advertising and trademarks, patents, intrenchment against competition through strong resources, standardized output, strong financial and banking connections, strong credit and collection policies, forecasting techniques, and a large

variety of other factors may contribute substantially to earning power and hence be valuable.

It is at this point that the asset approach to valuation breaks down completely. The conventional method of valuing intangibles is to capitalize excess earnings as stated earlier in the chapter. The only advantage in separating excess earnings and capitalizing them separately rather than capitalizing the earnings of the enterprise as a whole at the start, lies in the fact that the interest rate may be more accurately determined if the assets are broken down into the various groups. That is, a breaking down of the intangible assets may tend to prevent the setting of too high or too low a rate of capitalization by causing greater study of the facts. It is doubtful, however, if results are much more accurate than those obtained by merely capitalizing total earnings. Some intangibles are more durable than fixed assets, others less so. Super-earnings are scarcely traceable to individual intangibles, nor is the duration of individual components of super-earnings predictable. Although past earnings afford some clue to the future, they are not entirely dependable. It is probable that valuations obtained by capitalizing earnings as a whole are quite as accurate as those obtained by mixing asset and super-earnings appraisals. Certainly the direct earnings approach is less roundabout.

Earnings Approach.—Valuation of a going concern by the earnings approach method involves estimating average future earnings and then capitalizing them at a suitable rate. Thus a business with estimated average future earnings of $200,000 would be valued at $1,000,000 if 20% were a fair return on capital ventured in that enterprise. Like the asset method, however, this method gives speculative values. The estimate of future earnings is speculative at best, and the determination of an interest rate applicable to the enterprise is scarcely a more exact process. Earnings are estimated primarily by projecting past experience into the future and then modifying the result to conform with probable changes in conditions. Rates of return are found by examining the past rates of capitalization for the industry as ascertained by comparing earnings

and stock exchange quotations over considerable periods. The rates thus obtained are then modified to reflect probable future changes. Thus in the above illustration, the average price of securities sold on the exchange (as indicated by stock exchange quotations) multiplied by the amount outstanding would give an aggregate market value of $1,000,000. By dividing this $1,000,000 into the average earnings of $200,000, it is found that the market capitalized the earnings at a 20% rate. The market rate is determined by the attitude of the investing public. The size of the interest rate varies according to the risk of loss of capital, the social standing of the industry, the susceptibility of the industry to seasonal and cyclical variations, the amount of capital involved, the technical knowledge necessary to understand the industry's activities, and a thousand and one preferences and prejudices in the tastes of investors. These determine how much the investor will pay for the securities, or, in other words, the amount of yield he will demand. To a certain extent the valuation process can use current rates of capitalization; but for the securities to stand up in market value over the long run, long-term rates must be used in setting up the financial structure.

Despite its obvious limitations, the earnings method of valuation is the most satisfactory and hence the most common method used in this country. Since the asset method ultimately involves the capitalization of earnings to find the value of certain groups of assets, it is quite logical to shorten the calculations by valuing the whole business on a basis of earnings. The more imposing arrays of figures obtained by the asset approach cannot be said to give greater accuracy to the final result. But frequently both approaches will be paraded before the security holders of constituent companies, not because they give greater accuracy, but because some security holders can be persuaded to approve the consolidation if the asset approach is emphasized, and others if the earnings approach is stressed. It should always be borne in mind that the schedules submitted to the general public are merely propaganda to facilitate consummation of a predetermined plan, and very seldom do they contain all of the vital factors that

entered into the final set-up. Thus in the ill-fated plan for merging Youngstown Sheet and Tube Company into the Bethlehem Steel Corporation, the data submitted to the public were frankly to show that the plan was fair to the Youngstown company—in other words, to put over a policy rather than to demonstrate a scientific basis of valuation. For the most part, public plans are dressed up to get the desired support, and a moderately intelligent group of corporate officials can make the plans look very scientific and fair. Hence, it is necessary to get behind the scenes to know what is actually being done.

Market Value of Securities Approach.—The market value of securities approach proceeds in accordance with current market values. Securities of the consolidated company are exchanged on the basis of the existing market values of the securities of the constituent companies. The financial plan is so drawn that the probable market price of the new shares will be at a particular level. For example, the average market price for the past month of Co. A's shares has been \$20, for Co. B, \$30. The new company formed from the two could issue one share for each share of Co. A stock and one and one-half shares for each share of Co. B stock. If higher priced shares were desired, the new company could issue one share for each three shares of Co. A stock and one share for each two shares of Co. B stock. If the same market conditions prevailed after the market had digested the securities of the new company, the shares would sell for about \$60.

It is noteworthy that this approach is similar to the earnings approach in that the earnings approach utilized market values in determining rates of capitalization. It differs from the earnings approach primarily in that it ordinarily uses a short-term period of prices. Indeed it would be very difficult to use the market value approach on a long-term basis because the amounts of securities outstanding and the amounts of earnings vary greatly over long periods. This factor of variation is the chief weakness of this approach. It is not desirable to base financial plans and security exchanges on short-term relationships since such relationships may be distorted seriously for temporary periods.

This method finds greatest vogue in cases of merger, where shares of an established nucleus company are exchanged for those of companies to be merged. Dr. Findley Weaver found this to be the chief method of consolidation used in the petroleum industry. He summarizes his investigations as follows:[1]

A statistical analysis shows that the actual basis according to which common stock was distributed was the market value of the stock of the companies participating in the consolidation without reference to their assets or earnings. Further study reveals that those who held stock of companies which were acquired to form a part of a larger organization generally received stock of a higher total market value than they held before while the stockholders of the larger companies received stock with the same or a smaller total market value.

The Bargaining Element.—Whatever may be fed to the public and whatever may seem to be the scientific basis of a consolidation plan, an actual plan is the result of a bargaining process in which scientific principles and valuations are but a few of the pawns. As Mr. William R. Basset puts the matter in a most charming yet unexaggerated way,[2] "it is foolish to assume that bargaining is a lost knack in commerce and finance. Compared with a man jockeying to get the best price for his business from a merger, David Harum was little more than the village idiot and his much vaunted hoss trading ability as open and naïve as a child's request for a penny for candy." Only one who has been through such negotiations can realize the weight that bargaining factors carry in determining the final plan. These factors will vary according to the circumstances of the individual case, but certain factors are of sufficiently frequent occurrence to warrant being taken up at this point. These factors are: control, cash position, management, competitive position, and market control of securities. They will be taken up in turn.

Control.—Control of a corporation has two aspects: (1) officers and directors temporarily in the saddle and (2) voting

[1] Weaver, F., *Recent Consolidations in the Petroleum Industry, a Study of Causes and Financial Results*, An Abstract of a Thesis, Univ. of Illinois, 1931.
[2] *Operating Aspects of Industrial Mergers*, Harper & Bros., New York, 1930, p. 108.

share control. Officers and directors are, of course, in a strategic position during their period of office. Since each method of consolidation by direct ownership of properties requires the negotiation of an agreement between the representatives of the respective corporations and ratification of this by the stockholders, the directors and officers are in an excellent position to facilitate or block proceedings. They cannot permanently thwart the will of the majority of stockholders, but during the period of their incumbency they are in control of the corporation. If they are opposed to a course of action that the stockholders favor, two courses ordinarily remain open; namely, the stockholders may wait until the next election and turn the directors out, or increase the board of directors until the opposing directors are in the minority. If immediate action is desirable, the latter course must be chosen. Thus E. L. Cord defeated a consolidation plan of Aviation Corporation of Delaware by moving to have stockholders increase the directorate from 35 to 68.

Voting share control is ordinarily represented in one of three ways: (1) support of an outright majority of shares, (2) domination of a voting trust representing voting control, or (3) control through classified voting stock. Control through classified stock is usually obtained either by disenfranchising a large amount of stock or by conferring exceptional voting privileges upon a special class of stock. For example, 1,167,773 shares of class B stock of Utilities Power & Light Corporation had sole voting power in a capitalization with more than 5,000,000 shares outstanding on December 31, 1932; at the same time the Doherty interests controlled Cities Service Company through 1,000,000 shares of $1 par value preferred stock having voting power equivalent to 20,000,000 shares of common. The voting trust is usually resorted to, to prevent other interests from dislodging the existing management. In 1927 a number of Connecticut public utilities resorted to the voting trust to prevent their absorption in various consolidation schemes then being promoted in that region.

A management backed up with voting control of a cor-

poration is both an aid and an obstacle to consolidation negotiations. Voting control gives an authoritativeness to negotiations that a weak management cannot give. Hence the parties can proceed on the assumption that if an agreement is reached, it will probably be put into effect. This assurance makes it possible to disclose facts that might be withheld for fear that the plan would not materialize. Effective control also strengthens bargaining position in that other parties realize that they cannot buy up working control of the organization if present negotiations fail. Nor is the management under any great pressure from special interests to agree to an unsatisfactory plan. Further, when the final time comes for ratifying the plan, command of voting majority is an effective factor in securing the necessary stockholder approval.

On the other hand, the very power that voting control gives creates obstacles; for managements frequently use their corporate power for their own private ends. The welfare of the corporation or the industry degenerates into a question of who will be president or who will do the work. For example, Mr. W. R. Basset, of Spencer Trask & Company, cites the case of the man who refused to join a consolidation plan because "To become a mere vice president of the merger instead of president of a small concern would impair the social standing of his family and himself." [3] Then there is the great American game of running the corporation primarily for the management and only incidentally for the benefit of the stockholders. The ways in which the management profit are myriad, but a few of the more obvious are: manipulation of securities, salary and bonus grabs, and intercompany purchases and sales.) Playing the stock market with one hand while feeding out good news to the press and suppressing bad news has become an art with some managements. Others have created market trends for their stocks through purchases for or sales from the treasuries of their companies or those of affiliated companies. They have put out merger rumors and denied merger rumors as suited their convenience. They have put out bond issues at a discount and redeemed them almost

[3] *Operating Aspects of Mergers,* Harper & Bros., New York, 1930, p. 139.

immediately at par. Purchases of material at non-competitive prices from personally controlled companies are old gags. Finally, there are the bonuses and excessive salaries that the managements pay themselves. These all constitute factors which militate against consolidations unless the old management is to be in the saddle still and free to pursue its ways. If the old management is not to control the combined enterprises, an offsetting advantage must be offered to it for its cooperation in putting through the deal. This may take the form of a block of securities or a high salaried position. William Fox was eliminated from the Fox Film tangle by making him "chairman of the advisory board for five years, at a salary of $500,000 annually." The importance of these outside activities to some managements may be seen from the following summary of testimony of Harry M. Warner, president of Warner Bros. Pictures, Inc., before the Senate Committee on Banking and Currency:[4]

According to Mr. Warner's figures, he ended the year 1930 with 109,345 shares more than he had at the first of the year, 20,000 of which, however, were received from the company in the form of rights. Cash to the extent of $5,918,382.08 had been received as profits on purchases and sales, also, he said.

The 109,345 shares were figured at the low of 13, it was stated, making $1,421,485, which, added to the $5,918,382.08, gave for the total profit $7,339,867 for the year. Mr. Gray agreed, however, that perhaps the figure of 89,345 shares should be used for 109,345, thereby permitting the deduction of the 20,000 rights, and thus reducing the $7,339,867 to $7,079,867.

If the personal profit takes the form of securities in the consolidated company, capitalization is increased to a point where dividends are less ample per share or less certain. If it takes the form of an excessive salary contract, operating expenses are increased and profits per share again cut down. It is the padding that takes place in the consolidation process rather than the undesirability of a consolidation that makes many a consolidation appear to be an uneconomic proposition or a failure. Needless to say, dealings of this sort are directly

[4] *U. S. Daily*, May 23, 1932, pp. 1 and 3.

antagonistic to the interests of stockholders as such; and if the stockholders discover the facts before the agreement to consolidate has been ratified, they may effectively prevent consummation of the plan. Whatever may be their inclinations, successful negotiators must take their places at the table with more than scientific principles and valuation figures in the backs of their minds.

Cash Position.—A strong cash position ordinarily considerably strengthens bargaining position in consolidation negotiations. It is important from three angles: freedom from pressure, ability to purchase or assist others, and maintenance of credit.

Freedom from pressure to consolidate is an important factor in bargaining. With no pressing obligations to be taken care of and with ample liquid resources to engage in or withstand competitive price cutting, a company cannot be bullied in any way during the negotiations. On the other hand, a company vulnerable in this respect finds it very difficult to get the best terms in consolidation negotiations.

Ability to purchase another company's properties is always an aid, but it is especially so during a depression when bargains can be picked up under conditions of forced liquidation. Purchase may take the form of direct purchase of the properties or accumulation of stock on the open market. The classic example of bargains, of course, is Bethlehem Steel's purchase of the Fore River Corporation in 1914 at a price which was less than one-third of the income the property produced during the next two years. However, quite aside from purchase negotiations, strong cash position may be a considerable inducement for a weaker concern to join a consolidation. Such a weak concern may be facing cash problems which it will concede much to overcome.

Maintenance of credit is important in facilitating an exchange of securities or the sale of securities to obtain funds with which to purchase another property. With a cash position that removes all uncertainty concerning the continued payment of interest and dividends and that fortifies the ability to meet

the ups and downs of business conditions, a company can usually exchange its shares for those of a prospective merger member without much opposition from the latter's security holders.

Management.—Managing officials of a corporation can be divided into two groups: the line-staff which runs the corporate machine and the control group which organizes, determines policies, and makes major decisions. It is on the latter group that the financial success of the corporation chiefly hangs; and it is the latter group that constitutes an important factor in the trend of consolidation negotiations. If the control group is capable of running the enterprise on a profitable basis, they are under no compulsion to go into a consolidation unless everything is to their liking. If they can run the combined enterprises more economically than any other management group, they can hold out for a major share in the prospective economies in the consolidation. However, if on the other hand, they have shown poor results in the past, they cannot command sufficient confidence to retain them in control. A company without sound management—whether its plight is due to death or other loss of controlling geniuses or is due to past deterioration of management—is not in a strong bargaining position and cannot ordinarily drive a hard bargain in fixing the consolidation terms. In fact, if such a company is in bad shape, it may sacrifice much to bring about a consolidation as a means of salvaging a bad situation. For example, in attempting to bring about a consolidation of the First National, Boulder National, and Mercantile Bank & Trust Company of Boulder, Colorado, during 1933, the depositor's committee of the First National Bank actually proposed to the Comptroller of the Currency a plan by which the solvent stockholders of the First National would be released from their shareholder's liability if they would take a stock interest in the new consolidated bank to the amount by which they had been released.

The plan represented an act of desperation in attempting to get an ownership interest into the new banks.

Competitive Position.—Competitive position is dependent upon a large variety of factors; but objectively these ordinarily show themselves in one of three ways: namely, in great public demand for the goods or services, in low production costs, and/or in productive capacity capable of flooding the market. Public demand for the products may be based on the good will of trademarks, company name, or other considerations which will make the company a very desirable member of the consolidation.

Low production costs may be the product of either management or plants and methods or of both groups. The relative production costs of different companies is likely to vary greatly during different phases of the business cycle. The concern with large amounts of capital substituted for labor (using labor saving machinery) is likely to have low unit costs when producing in volume. In the boom phase of the cycle it can produce more cheaply than can any of its competitors. Carrying and other charges of its plant are relatively constant; whereas competitors using less equipment are subjected to greatly increased labor costs. Yet in the depression phases of the cycle decreased volume must absorb heavy overhead costs with the result that profits fall away rapidly, and in certain lines huge deficits occur. But the concern with a large labor factor and smaller machine factor can lay off its labor force, and thus reduce costs more in line with decreased volume. Hence, it may show profits when the other company is showing large losses. Over a complete business cycle, however, the machine company may be much more profitable than the labor company. If the former has sufficient liquid resources to tide it over the depression periods, it will, on the average, be the more formidable competitor.

The information on which one can study unit costs is frequently concealed until the negotiations have reached very advanced stages. However, in the early surveys the apparent profit margins can be ascertained from the general financial statements. The investment analyst is constantly faced with the problem of analyzing competitive position from the outside and can read much from relative tables of profit margins

on sales. The accompanying table gives profit margins for four companies in the same line of business.

Ability to flood the market, if accompanied with sufficient resources to withstand losses, is always a strong competitive factor. By cutting prices severely, a large volume concern can force severe losses upon its competitors if it does not completely crush them. Sometimes the selling is done directly; sometimes through puppet companies whose connections are concealed. Whatever the tactics of the concern, a large volume producer is a constant threat to price structures and is in a favorable bargaining position in consolidation negotiations.

PERCENTAGES OF NET EARNINGS TO NET SALES

Year	Co. A	Co. B	Co. C	Co. D
1932	0.52	D7.64	3.24	D11.06
1931	3.66	2.52	4.32	1.02
1930	6.77	12.84	4.84	22.04
1929	7.75	12.94	5.34	21.84
1928	8.54	11.87	4.32	20.76
1927	8.03	10.24	4.02	20.34
1926	8.12	10.36	4.03	20.26
1925	6.46	8.46	3.64	19.74
1924	5.34	2.85	3.52	18.24
1923	3.50	1.90	3.25	11.03
1922	2.98	0.74	3.02	2.34
1921	D3.06	D5.42	2.52	D6.73

Public utilities obtain similar advantages from location. Thus in the railroad field a necessary connecting link between two other companies is in very favorable bargaining position. This advantage is still retained by the bonds secured by such links in our large railway systems. Similarly, electric companies lying strategically between other companies have been able to drive excellent bargains. In addition to these strictly geographical considerations, other factors such as control of water power or low cost transportation routes are very important.

In all cases, special advantages may arise from the connection of the parties. For example, in one of its Utah promotions the Electric Bond and Share group refused to renew a power contract with an electric railway company and then bought in

the property. In the manufacturing field similar situations are found. Thus a chain store organization may contract for the bulk of the output of a particular concern to be sold under its own brand. Later by failing to renew the contract, it can force the manufacturer into a consolidation because the manufacturer has no means of disposing of his output.

Market Control of Securities.—Exchange of securities is ordinarily the most economical method of effecting a consolidation. If the securities of a new company or of one constituent are exchanged for those of other constituent companies, the expense of raising new capital can be avoided. However, sometimes in depressions cash purchases can be made very advantageously.

In most cases of exchange of securities, market prices are a dominating factor. It is very difficult to induce the exchange of shares unless shares of an equivalent or greater market value are offered for those given up. The general public probably looks more to market prices than to sound investment values; and since the insiders are taken care of in other ways, the real problem is to sell the public on the proposition. It is in this connection that market control is important; for if the market price of securities of a company can be stabilized at a relatively high level, an attractive offer can be made for the securities of another company.

Favorable market action of securities is obtained in a variety of ways. A liberal dividend policy tends to keep shares selling at a high level. Sinking fund purchases of bonds have the same effect on bonds. Purchases of securities of the company for its treasury reduce the floating supply and thus promote higher price levels. Then there are the more direct manipulations carried on through pools and through subsidiary security companies. The following statement indicates the extent to which some managements have carried these manipulations in the past:[5]

Testimony that during the stock market crash of October, 1929, the Cities Service Securities Company spent more than $128,000,000 pur-

[5] *New York Times,* April 26, 1933, p. 22.

chasing common stock of its parent, the Cities Service Company, was presented to the Federal Trade Commission today by Thomas W. Mitchell, the commission's economist-examiner.

"This sum bought 2,372,101 shares of Cities Service," he said, "but, as these amounted only to about two-fifths of the total quantity of that stock thrown into the market, they were not sufficient to uphold the market price, which broke to a low of $20 on October 29."

The testimony was given as hearings opened on the securities company, marketing and trading agency set up in 1927 by Henry L. Doherty & Company. The securities concern was owned wholly by the Cities Service Company.

Mr. Mitchell said the securities company's market activities constituted "an outstanding example of what is believed to be a general practice in modern finance and stock market control."

Although reforms recently instituted will probably not permit such an orgy of manipulation in the future, it is very doubtful that manipulation will be entirely eliminated.

The time for effecting an exchange is ordinarily a boom period. In such times the public is stock market conscious and optimistic. The generally rosy outlook makes it easy to sell consolidation schemes. Even though control or assets must be purchased at high prices, the boom conditions make it possible to sell the securities of the consolidated company at high prices too; so the burden of inflated prices is ultimately borne by the speculating public rather than by the consolidated company.

Negotiating an Exchange of Shares.—The simplest type of negotiation is that based upon the exchange of shares of one company for those of another. As previously indicated, in this type a strong company usually exchanges its shares for those of another and then merges it or retains it for a subsidiary. This process can be repeated from time to time until a large enterprise or system has been built up. It was in this way that many of the large enterprises of today were developed to their present size. The procedure functions equally well in forming either a direct property owning consolidation or a holding company system. The following letter to the stock-

holders of the General Baking Company illustrates the technique:[6]

General Baking Corporation
Room 505, 512 Fifth Avenue,
New York, N. Y.,
October 10, 1925.

To the Stockholders of General Baking Company:

In a letter dated September 29, 1925, addressed to Mr. William Deininger, the President of General Baking Company, by Mr. William B. Ward, a copy of which you have received, this statement was made: "For your information please let me say that it is the plan to form a new company to acquire the stock of said Company, and an opportunity will be presented to its stockholders at a later date to exchange some or all of their holdings for shares in the new Company."

The name of the new Company is General Baking Corporation. The authorized capital stock of General Baking Corporation is Five Million (5,000,000) shares of Class "A" Stock and Five Million (5,000,000) shares of Class "B" Stock, both without par value.

An offer is now submitted to exchange stock of General Baking Corporation for stock of General Baking Company on the following basis:

For one (1) share of common stock of General Baking Company, you may obtain (2) two shares of Class "A" Stock and six shares of Class "B" Stock of General Baking Corporation.

The Class "B" Stock has been issued in connection with the organization and promotion of the company for a contract and it is expected that the quarterly payment of dividends will be inaugurated January 1, 1926, by the payment of $1.00 upon each share of Class "A" Stock.

If you desire to exchange the stock of General Baking Co. which you now own for the stock of General Baking Corporation on the terms above set forth, you may so indicate on the inclosed blank and return the same by registered mail to the Guaranty Trust Company with a Certificate of Deposit, duly indorsed in blank which the Guaranty Trust Company of New York has already issued to you upon deposit of your stock under a certain deposit agreement with which

[6] Federal Trade Commission, Bakery Combines and Profits, pp. 14-15.

you are familiar; or if you have not so deposited your stock with the Guaranty Trust Company of New York and received its Certificate of Deposit, you may return by registered mail the inclosed form of application, to the Guaranty Trust Company, properly executed, together with the certificates of common stock of General Baking Company which you now hold, duly indorsed in blank, and in either case you will receive certificates of stock of General Baking Corporation on the basis above set forth.

This offer will expire October 24, 1925, and an early reply is requested.

Inclosed is an extract from the Certificate of Incorporation of General Baking Corporation and also a self-addressed envelope for use in connection with sending the stock certificates or Certificates of Deposit, with inclosed blank.

Very truly yours,

GENERAL BAKING CORPORATION,

Paul H. Helms, President.

Under Mr. Ward's assignment of his contract with Mr. Deininger to the General Baking Corporation, the latter company secured all the General Baking Co. stock deposited with the Guaranty Trust Co., either by cash payment or by exchange of its own stock therefor, and also acquired other stock directly from General Baking Co. stockholders in exchange for the corporation stock. On November 5 the corporation made settlement with the Guaranty Trust Co. under its agreement with the latter and assumed control of the General Baking Co. On the same date the Guaranty Trust Co. returned to W. B. Ward his guaranty deposit of $2,000,000.

Negotiating an Amalgamation.—In case the companies are to be amalgamated into an entirely new corporation, a serious valuation problem arises. Many points of friction are likely to develop, and much inside competitive information must be concealed until the consummation of the project is certain. Because of these difficulties it is preferable to agree on a formula to be applied uniformly to each company and then arbitrate differences arising from its application to individual details. This formula should be embodied in a contract of consolidation which should cover all essential details. The bases on which securities are to be issued and allotted to the

constituent companies should be definitely set forth. If property values and earnings are to be ascertained, a method for valuing the different classes of asset and for adjusting book earnings should be stated. The contract should also contain provisions dealing with the assumption of debts, the securing of working capital, and any mortgage covenants to be entered into. The following is a memorandum of consolidation used in connection with the amalgamation of a number of small businesses.

MEMORANDUM OF CONSOLIDATION [7]

A corporation to be formed under the laws of the State of Michigan, with a paid-up capital of ten million dollars, to be apportioned into 6% preferred stock and common stock, as the parties interested may hereafter determine.

This corporation to purchase all the assets, property, good will, etc., of all the four companies and to pay therefor in preferred and common stock and by an assumption of the indebtedness of each company.

The amount of preferred and common stock, to be paid to each company, to be determined by the value of the net tangible assets and the valuation placed upon the earning power of each company.

In placing a value upon the tangible assets, same to be reached as follows:

(1) The land, buildings, machinery, tools, and patterns, to be determined by appraisers, to be chosen by a majority of a committee made up of one appointed by each of the companies; on failure of this committee to agree on appraisers the selection to be left to the committee who present these suggestions.

(2) Inventories of raw materials, work in progress and manufactured stock to be taken, and valuations placed thereon by the individual companies, and this to be done under the supervision of a disinterested party, to be named by the committee.

The inventories are to be made as of the same date, and to be taken at substantially the same time.

When completed the inventories are to be passed and agreed upon by a committee consisting of a representative of each of the companies and one to be named by the committee. The decision of these five to be binding.

[7] Quoted by W. H. Lough (*Corporation Finance*, pp. 183-185, Alexander Hamilton Institute, 1913) from an article by F. H. McPherson in the *Journal of Accountancy*, November, 1908.

(3) In reaching the value of the earning power of the several companies, consideration is to be given to the following details:

(a) That profits are incidental to the business and have not been anticipated.

(b) To the charging to operating expenses of items, exceptional or unusual, and which have had the effect of reducing profits below normal.

(c) The effect upon the earnings of the money paid out as interest upon borrowed capital, in case it be found that the borrowings (loans) made by the several companies are disproportionate to each other.

(d) That all charges to operating expenses are proper charges against the business and that they are made for and during the proper period.

(e) That proper and reasonable allowances have been made for repairs and renewals and that these have been charged against earnings.

(f) That charges against earnings for depreciation are adjusted upon an equitable basis.

(g) Such other matters as appear from an examination of the accounts and which would prejudicially affect the earnings of any of the companies, either advantageously or disadvantageously.

(h) The value of the earning power to be determined by a consideration of the business done by each of the several companies for the three years, 1903, 1904 and 1905.

(i) Accountants to be selected by the committee and questions which may arise as to treatment of various matters and about which there is difference of opinion, to be determined by the committee.

(j) All costs and expenses incurred in making appraisals, examination of accounts, or of performing the other duties in connection with the formation of the proposed new company to be charged to and borne by the new company; should the new company not be formed, then such costs, expenses, and disbursements to be borne by the four individual companies in proportion to the number of men employed by each.

Sinclair-Prairie Consolidation.—A similar procedure was followed in the negotiations conducted by Sinclair Consolidated Oil Corporation, Prairie Pipe Line Company, and Prairie Oil and Gas Company during 1931 and 1932. The

joint statement of the several boards of directors is reported by the *Wall Street Journal* as follows:[8]

"In connection with the determination of the relative values of the assets of the respective companies," the joint announcement states, "the directors took various factors into account. Consideration was given to the assets and liabilities and the resulting net worth of the three companies as shown by a statement prepared by Arthur Young & Co., accountants and auditors, after making adjustments deemed by them necessary to properly reflect the book values on a comparable basis.

"Investigations of the properties of the various companies were made and a uniform measure or yardstick of evaluation was applied to certain properties of a similar character. Recognition was accorded to the strong cash and current asset position of the Prairie Pipe Line Co. and consideration was given to the prospects for business and earnings of the properties in combination as distinguished from those of each company standing separately."

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[8] January 14, 1932, p. 7.

CHAPTER 20

CAPITALIZING CONSOLIDATED COMPANIES

The final financial plan for a direct property owning consolidation is ordinarily built out of a heterogeneous mixture of materials: namely, the theoretical standards one would prefer to apply and the heritage of old financial structures of constituents that one must accommodate. Hence, the problem of financing must proceed along two lines: (1) the building of a combined financial structure which will not violate fundamental relationships of securities to earnings and to assets, and (2) the assumption of debts and the distribution of securities to the owners of constituent companies in such a way as to make the consummation of the plan possible.

Maximum Limits to Security Issues.—The first line of procedure must ordinarily be considered very early in the consolidation study, for if the constituents cannot be put together in a sound structure, the plan is without merit and should be dropped. An early survey must be made, therefore, to determine the maximum amounts of bonds, preferred stock, and common stock the combined unit can carry. These amounts are found by combining the earnings and the assets of the separate units and then finding what types and quantities of securities they will support.

The soundest structure, of course, would be one containing only common stock; for if the company owes no one, it cannot be harassed by creditors. Next in strength would be a structure containing preferred and common stock. Here again, the interests are merely ownership interests without legally enforceable fixed charges against the property. Although preferred stocks are frequently protected by restrictive covenants of one type or another, the fact remains that dividends do not have to be paid unless the cash can be spared. This is the

essence of corporate strength during depression. Finally, and weakest, is the structure containing bonds or other liabilities. Here the pressure of creditors is always present or prospective. Inability to meet fixed charges or payments of principal during poor years threatens the business with receivership and reorganization, with consequent impairment or elimination of owner's equities in the corporation.

However, regardless of desires in the matters of risk taking, the consolidation must be built out of the constituent companies. Some of these will frequently have one type of financial structure, some another. It is necessary, therefore, to find the maximum sound amount of bonds, etc., that can be issued, and then to see if the aggregates of the constituent issues can be accommodated. We now proceed to the problem of determining maximum limits. Example:

BOND STANDARDS

Company	Total Tangible Assets	Liquidation Value	Average Earnings	Minimum Earnings
Co. A . . .	$1,000,000	$ 300,000	$150,000	$ 40,000
Co. B . . .	2,000,000	500,000	250,000	75,000
Co. C . . .	3,000,000	700,000	300,000	100,000
Consol. Co. .	$6,000,000	$1,500,000	$700,000	$215,000

If we assume that in order to sell bonds on a 5% basis all debt should be covered by liquidation values, that bond interest should be earned four times on the average, and that it should be earned by a margin in the poorest year, then the limits imposed by the above schedule are as follows:

1. Maximum debt on liquidation value basis:

   $1,500,000

2. Maximum debt on average coverage of fixed charges basis:

$$\frac{\$700{,}000}{4 \times .05} = \frac{\$700{,}000}{.2} = \$3{,}500{,}000$$

3. Maximum debt on coverage of charges in poorest year basis:

$$\frac{\$200{,}000}{.05}$$

$= \$4{,}000{,}000$ (allowing $15,000 surplus coverage)

According to these standards, liquidation values would set the maximum debt limit since this standard is the most restrictive. That is, the debt structure should be kept within the limits of each standard. Consequently, that standard which sets the lowest limit to the amount of debt is always the effective standard in the particular case. Thus in the above example, had the minimum earnings been \$50,000 instead of \$215,000, they would have supported a total debt of only \$1,000,000. Hence, under this supposition the earnings in the poorest year would have been the limiting factor. If we are to use standards based on relationships to assets and to earnings, each must be computed. Then the most conservative one must be selected and applied.

Many writers give little attention to asset values in testing structures because asset values ultimately depend on earning power. Yet there are several angles of the problem which make assets an important theoretical consideration. First, since bondholders do not share in the extra profits of prosperous business, they should not bear the risks of loss if the business does not succeed. In effect, this means that they should always be protected by liquidation values. Second, assets are essential to the creation of earnings; and to the extent that competitors must duplicate them, they constitute a protection to earning power. Third, we are drifting more and more toward social limitation of profits—particularly since the advent of the F. D. Roosevelt administration. Whether this limitation takes the form of excess profits taxes or direct profits limitation and regulation is immaterial. The facts are that eventually business can expect the government to pay more attention to the rate of earnings on assets with correspondingly increased emphasis on asset values. And although it may be many years before anything like effective limitation of profits will occur, still the drift seems to be ever in that direction.

Preferred Stock Standards.—If we assume now that preferred stock is to take a part ownership risk in the business (that is, bear risks to the extent that it will be protected by

going business values rather than liquidation values) and if we assume that such preferred stock will sell on a 7% yield basis on the condition that prior charges and preferred dividends be earned at least three times on the average and fully earned in the poorest year and on the further condition that the assets cover debt and preferred at least twice, then the limits imposed by the above schedule are as follows:

1. Maximum preferred stock issue on asset basis:

$$\frac{\$6{,}000{,}000}{2} - \$1{,}500{,}000 \text{ (debt)} = \$1{,}500{,}000$$

2. Maximum preferred stock issue on average coverage of combined charges:

$$\frac{\dfrac{\$700{,}000}{3} - \$75{,}000 \text{ (interest)}}{.07} = \$2{,}262{,}000$$

3. Maximum preferred stock issue on coverage of combined charges in the poorest year:

$$\frac{\$215{,}000 - \$75{,}000}{.07} = \$2{,}000{,}000$$

Here assets are again the limiting factor on total capitalization.

Caution.—It must be borne clearly in mind that these assumed standards are nothing more nor less than assumptions. They will fit certain types of companies but not others. Each company and each industry has characteristics and prospects of its own, and the standards used must take account of the effect of these on earnings stability. Thus in each case the weight given to asset values and the "times charges earned" standards will be affected by the sources and stability of earnings, the character of the industry, the position of the company in the industry, the state of competition or monopoly, labor relations, established sources of raw materials, established markets for products, and a variety of other considerations which affect the business risk directly. Hence there are no standards which can be applied uniformly to all companies, without adjustment. For practical purposes each industry and company must be studied by itself.

In the matter of preferred stock issues, standards are at best arbitrary. Preferred stock is a hybrid security partaking partly of the nature of bonds and partly of the nature of common stock. What it shall be in a given case depends largely on the issuer. It may approximate bonded debt, or it may approximate common stock; or, depending on what class of investors or speculators is to be reached, it may lie between these extremes. However, in a measure, the yield at which such issues sell in the market tends to fix standards for particular yields. Therefore, the above standards have been expressed in terms of definite yields.

Common Stock Standards.—The common stock will bear the risks of the enterprise. It will also reap the residual profits. The essential thing in financing is to see that the earnings left for common stock will be sufficient to keep the market price of shares at the desired level. If we assume in the present case that, given the maximum amount of debt and preferred stock, common shares will sell at ten times average earnings, common can now be issued against tangibles and intangibles to the par value of:

$$\frac{\$700{,}000 - \$180{,}000 \text{ (prior charges)}}{.10} = \$5{,}200{,}000$$

Final Limits.—The final maximum limit to each class of security on the above assumptions may be conveniently shown in the following balance sheet:

Tangibles	$6,000,000	Debt	$1,500,000
		Preferred Stock.	1,500,000
Intangibles	2,200,000	Common stock	5,200,000
	$8,200,000		$8,200,000

Two things need be noted at this point: (1) intangibles are shown on the balance sheet to offset a portion of the common stock, and (2) no allowance has been made for increased earnings traceable to the economies of consolidation.

Intangibles.—Intangibles are frequently eliminated from the balance sheet by inflating the values placed on tangible properties. So, by a liberal appraisal policy, plants of the above

constituent companies could find their way onto the books of the consolidated company at an aggregate value of $8,200,000. Thus no intangibles would be shown. The extra $2,200,000 would in common parlance be called "water" and the stock issued against it, "watered stock." This practice has been severely criticized, but nevertheless is time honored. The inflation of asset values causes many problems in interpretation of statements and is otherwise objectionable, but discussion of these angles will be deferred to the chapter dealing with depreciation. Eventually the Securities and Exchange Commission will probably control asset valuations closely in the United States.

Earnings Arising from the Economies of Consolidation.—Various points of view exist as to the desirability of capitalizing the prospective economies of consolidation. Some contend, on the basis of past experience, that these economies are more likely to exist in the promoter's imagination than in fact, and that therefore they should not be capitalized. However, as a practical matter consolidations are usually promoted for one of two reasons: (1) because the promoting group has a sincere belief in the desirability of the consolidation or (2) because they want to sell a consolidation to the public. Whichever motive dominates, the economies are likely to be capitalized. If one reasonably believes that the economies will materialize, he is optimistic enough to capitalize them. If he wants to sell to the public, he will obviously capitalize as much prospective earning power as is possible. Further—and a very powerful factor—if separate financial interests are to be brought together, the excess securities based upon prospective economies provide the chief means of paying the fancy prices and bonuses necessary to induce the independent groups to come into the consolidation.

But to say that economies will be capitalized is not to say that they should be considered in fixing the maximum limits of senior securities. It is notorious that consolidation economies do not materialize according to predictions. Whether this be due to fat salary grabs, depreciation of padded asset accounts,

other financial manipulations, or just to poor forecasting is not material; the facts are that the earnings in all too many cases fail to measure up to the sedulously advertised expectations. Conservatism, therefore, would dictate that bond interest charges be measured against the tested earnings experience of the constituent companies. To the extent that it is desired to make the preferred stock an investment issue, it too should be related to the tested earning capacity. Common stock can then be used to capitalize the economies of consolidation. As Hartley Withers remarks, if you are in the proper state of optimism the number of noughts you put on the end of the figure for common stock seems immaterial. In the very overissue of stock you may be able to retain enough to perpetuate your control of the company. With control secure you can reward yourself with excellent salaries and bonuses—to a point that makes a return on the common shares you may hold a minor consideration. However, assuming more conservative standards, common stock should, of course, be kept within the determined price-earnings ratio to reasonably anticipated earnings.

Accommodating the Structures of Constituents.—We are now in a position to compare the securities structures of Companies A, B, and C to the final limits set for the consolidated company. For this purpose we may assume the following structures.

Company	Liabilities	Preferred Stock	Common Stock
A		$300 000	$700,000
B	$300,000	700 000	1,000,000
C	1,000,000	1,000,000	1,000,000
Total	$1,300,000	$2,000,000	$2,700,000
Consol. Co. limits . . .	1,500,000	1,500,000	5,200,000
Difference . .	—$200,000	+$500,000	—$2,500,000

The bonded debt and common stock are well within the prescribed limits, but the preferred stock total is $300,000 in excess of the combined debt and preferred stock standard. (The total amount of preferred may be increased or decreased

in accordance with the amount of prior debt. The smaller the amount of liabilities, the greater the possible amount of preferred stock. In this case the low debt permits a larger issue of preferred stock.) Hence, the debts of the constituents can be assumed by the consolidated company without danger. The excessive amounts of preferred stock can be accommodated in one of several ways. First, the consolidated company could issue the full amount in preferred stock. This procedure would make the preferred somewhat weaker than the standard. Second, in effecting the exchange of shares, it could convert some of the preferred stock into common stock. Third, and least desirable, it could exchange a combination of bonds and common stock for a portion of the preferred stock of one of the constituents. What is done in the individual case is a matter of bargaining among the various interested groups.

After the creditors and preferred stockholders have been taken care of, the remaining securities allotted to a constituent are distributed to the common stockholders, bankers, etc.

Treatment of Top-heavy Constituent Structures.—It will be noted that Company C has an excessive debt. The consolidated company is able to assume this debt without overburdening its debt structure because Companies A and B were not bonded to the maximum limits. Had these companies been bonded to the limit, it would have been dangerous to take Company C into the combination unless a part of the combined debts could have been replaced by stock. It is far better to leave a top-heavy company out of the plan than to endanger the consolidated structure. However, if the consolidated structure can accommodate the top-heavy structure and there are substantial advantages in including it in the consolidation—then, obviously, it should be included, and any disadvantage arising from the top-heavy debt should be allowed for in distributing the shares of the consolidation. There are various ways of treating the top-heavy debt. One way is to deduct, say, 125% of the face amount of the excess portion of the debt from the total amount of securities allocated to the particular constituent. For example, if Company C has been allocated a

total face amount of securities of $3,448,000 (average earning capacity capitalized at 8.7%, the rate at which we capitalized the entire consolidation), then we should deduct from this total 125% of $300,000 excess of debt and $700,000 non-excessive debt (based on liquidation value) to determine the amount of combined preferred and common stock to be made available to Company C stockholders. We would thus deduct $375,000 plus $700,000 or $1,075,000. If we now assume that our standard will not allow more than $1,500,000 ($3,000,000 assets ÷ 2) combined debt and preferred for allotment to Company C, this process of penalizing debt leaves only $425,000 ($1,500,000 ÷ $1,075,000) of preferred stock of the consolidated company for distribution to Company C stockholders. This means that some of the common stock allotted to Company C will have to be distributed to its preferred stockholders in effecting the exchange of shares for those of the consolidated company, or some other compromise will have to be effected.

A similar method proceeds on the theory of a basic structure containing only preferred stock and common stock. Under this plan all debt, whether top-heavy or not, is penalized at the rate of, say, 125%. This method assumes also that each constituent company will receive its full amount of preferred stock and common stock as determined by applying an accepted standard to the assets and earnings of each company.

Both methods are subject to criticism in that it is not necessary that the securities be allocated in this way at all. There is no real reason why the owners of one corporation should not take a disproportionate amount of common stock in the consolidation and those of another corporation take a disproportionate amount of preferred stock. In fact, such an irregular allotment is very common, and is more likely than not in cases of merger, as contrasted with amalgamation. In merger cases, it is customary to use a strong company as a nucleus and then merge other companies into it. In following this procedure, definite offers to exchange securities are made to the stockholders of the company to be merged. The securities offered may be any one or combination of several of

those of the nucleus company. The securities are offered with due regard to the final structure of the merger, but the main consideration is usually the relative market prices of the securities offered and those to be obtained. As long as a slightly larger market value in securities is offered for those to be obtained, an exchange can usually be induced. The debts, of course, are ordinarily assumed and do not figure in the exchange offers.

Yield Method of Penalizing Top-heavy Structure.—Another method which has some theoretical merit is to approach the problem from the yield standpoint. This method can be explained by means of an illustration. Assume that the top-heavy bonds of Company C are selling to yield 7% when sound bonds according to our standard would sell to yield 5%. This extra yield of 2% represents the market's estimate of the extra hazard present in this over-liberal issue. Under the yield-penalty method, the deduction for bonded debt would be increased by a percentage equal to the ratio of excess yield to standard yield or 40% (2% to 5% = 40%). Thus bonded debt of $1,400,000 ($1,000,000 + $400,000) would be deducted from the total allotment of securities to Company C in determining the amount left for preferred and common stock. The theory of this penalty is that the interest charges of the bonds represent a real risk to the corporation. The risk that the corporation will not be able to pay is as much a threat to the ownership equity in the corporation as it is to the investor. Hence, Company C stockholders should compensate the other groups entering the consolidation by taking a correspondingly smaller total allotment of securities. In this way relative justice can be meted out to the various constituents which have contributed to making the bonds safer.

If the securities are to be distributed by applying a given standard to earnings, the same result can be obtained by deducting the penalty amount from the earnings available for fixed charges and preferred dividends. For example, if the debt is in excess of the amount the standard permits and is selling on a 7% basis instead of a 5% basis, in applying

combined standards for the allotment of securities the extra yield can be deducted from the amount available for interest and dividends. Thus the interest burden of Company C's debt could be considered $70,000 (7% of $1,000,000) instead of the amount actually called for in the bonds. This extra amount of deduction would decrease the amount of earnings to be capitalized in preferred and common stock.

Preferred Stock for Asset Method of Allotting Securities.—Some writers have placed considerable stress on a method of financing consolidations by which preferred stock would be given for net tangible assets and common stock would be given for capitalized super-earnings. This method is supposed to have been used extensively in effecting industrial consolidations at the beginning of the present century. However, a casual examination of the structures of that period reveals that earning power was a vital factor in determining the amount of preferred stock issued. In cases of low earning power the amount of preferred stock was restricted to the amount the earnings would carry. In cases of high earning power, assets were inflated in the balance sheets. In truth everything points to the fact that the distribution of securities was really determined by a bargaining process and the prospectuses made to appear plausible.[1] Recent consolidations have conformed even less to this method than did the earlier ones.

Probably a better line of approach to the problem of allotting securities to constituents is that already suggested; that

[1] K. Simpson, in *The Capitalization of Goodwill,* pp. 45-46, makes the following observations about 46 private businesses which were incorporated:

"The ratios of the tangible assets to the preferred issues furnish the basis for some reasonably satisfactory generalizations. The average of the figures in the second column is about 1.39. In other words, the amount of preferred stock issued by the companies, studied by the table, was roughly seven-tenths of the tangible assets. In more than one-third of the cases recorded the preferred stock was about equal to the tangible assets. The fact that the average is as high as it is can be explained by several causes; first, earlier in the history of these industrials when preferred stock of this kind was not so well known, some of the issues were more conservative; second, the smaller companies, which were comparatively less stable, had to be more careful in their financing; third, industrials like the agricultural implement companies, the earnings of which seemed likely to be subject to great fluctuations, were wisely somewhat conservative in their preferred issues. All these factors tended to make the average for this table higher than the figure which represented the usual practice, that is, the practice which obtained in the largest number of flotations."

Similar studies of a large number of consolidations present a similar picture.

is, for the promoters to apply the same standards to each constituent that they apply in determining the final structure of the consolidated company. They can then allot bonds, preferred stock, and common stock to each constituent according to a uniform principle. Adjustments can be made by a uniform system of penalizing unbalanced structures. If this procedure is adopted as a starting point for negotiations, then the major remaining source of difficulty will be the method of sharing the profits arising from the anticipated economies of consolidation.

Division of Stock Capitalizing the Economies of Consolidation.—Several methods have been suggested for determining the proportion of the savings of consolidation to go to each constituent. Dr. Gerstenberg has assembled a large number of "scientific" plans in his book, *Financial Organization and Management.*[2] In order to illustrate their general tendency, some of these plans will be briefly summarized and adapted to our problem.

Plan I requires that the increased earnings resulting from the consolidation be allotted to the constituent companies for capitalization in the ratio that their individual average earnings bore to aggregate average of all constituents. Thus since Company C had three-sevenths ($300,000 ÷ $700,000) of the aggregate average earnings, it would share to the extent of three-sevenths in the increased earnings traceable to the consolidation. This plan assumes that each company will contribute to consolidated savings in proportion to its present earnings and should therefore be compensated on this basis.

Plan II requires that the companies share the savings in the ratio that their former super-earnings were to the aggregate super-earnings of all constituents. For example, if we use 8.7% as a normal rate of return on tangible assets in our problem, Company A has super-earnings of $63,000 ($150,000 — 8.7% of $1,000,000), Company B $76,000, and Company C $39,000. The aggregate is $178,000. Hence, Company C would be allotted 39/178 of the total savings.

[2] p. 546ff., 1926 edition.

This method assumes that exceptionally efficient units will be able to contribute exceptionally to the combined savings.

Plan III requires that the companies share all super-earnings in the ratio that their rates earned on tangible assets bear to the sum of the individual rates earned. Under this plan Company C would receive 100/375 (Co. A 15%, Co. B 12½%, Co. C 10%, sum 37½%) of the aggregate super-earnings, including those derived from the savings of consolidation. By this method the super-earnings of the old companies, aggregating $178,000, as well as the savings of consolidation, would be divided among the constituents.

Plan IV requires that the companies share all super-earnings in the ratio that each one's super-rate, earned on tangible assets, bears to the sum of the super-rates earned. Company C would be allotted 13/114 (Co. A 15% — 8.7% = 6.3%, Co. B 12½% — 8.7% = 3.8%, Co. C 10% — 8.7% = 1.3%, sum of super-rates = 11.4%) of the total super-earnings ($178,000 plus savings).

Plan V requires that the companies share the savings of consolidation in the ratio that their tangible assets bear to the total tangible assets of the consolidation. Under this plan Company C would be allotted one-half ($3,000,000 ÷ $6,000,000) of the earnings anticipated from the economies of consolidation. This plan assumes that the contributions to economy will be in proportion to the constituent's assets.

Perhaps enough has been said to indicate that "scientific" as applied to these plans really contemplates an arithmetic formula based upon assumptions having some degree of logical plausibility. In fact, a plan for distributing securities could scarcely be more than this. Corporate values are elusive at best. The contribution which a particular constituent will make to an anticipated joint economy is anything but a certainty. Human judgments and human forecasts differ. Further, it must be borne in mind that consolidations are promoted by human beings. It is scarcely to be conceived that when uncertain "scientific" principles conflict with our private purposes, private considerations will give way. Hence, if we look at these plans in the guise of campaign propaganda to win stock-

holder approval and realize that actually a considerable amount of give-and-take bargaining preceded the formulation of the plan, we can see the problem a little more clearly.

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CHAPTER 21

PRINCIPLES OF HOLDING COMPANY FINANCING

The principal problems of holding company financing may be discussed under the headings: substitution of securities, typical percentage of common stock ownership, relationship of securities to system earnings and assets, pyramiding, the financing function, and the assumption function.

Substitution of Securities.—As has been noted from time to time, the outstanding feature of holding corporations is that they control other corporations through ownership of their voting stocks. There are three methods by which holding companies acquire voting stocks of other companies: (1) by exchanging their securities for the voting stocks of other companies; (2) by purchasing those voting stocks for cash in the open market; and (3) by a combination of these methods. From the standpoint of the owner or purchaser of common stocks, each of these three methods has two results: first, the stocks of the controlled companies are withdrawn from the hands of the purchaser of common stocks; second, the securities of the holding company are substituted in the hands of the purchaser of common stocks for the stocks of the controlled companies.

This principle of substitution of securities may be applied likewise to other types of securities of controlled companies. For example, in 1927, the People's Light and Power Corporation held all the stocks and bonds of fourteen subsidiary corporations. Likewise, in 1926, only nine of 64 companies in the Republic Railway and Light Company system had securities outstanding in the hands of the public.

Economies Due to Size of Issues.—From the foregoing examples it is seen that the holding company substitutes large issues of its securities in the place of many small issues of

subsidiary companies. It is by this process that the chief economies obtained through substitution of securities arise. Large security issues make economies possible because it costs less, per dollar obtained, to underwrite large issues than it does to underwrite small issues; further, securities of large issues tend to be bought and sold more frequently than do those of small issues. The frequent buying and selling of securities makes them more marketable if the investor wishes to shift or dispose of investments; and also makes them more valuable as collateral because their market value can be more readily ascertained.

These economies are of substantial importance; but in passing, it should be noted that certain losses occur in connection with the substitution of securities. The costs of acquiring the control of outstanding stocks and of substituting new securities for them are some of those losses. However, in the public utility field most of the operating companies are now controlled by holding companies, so that new substitutions represent the shifting of securities between holding company systems or growth requirements which can be effected with considerably less cost. Indeed, the new common stock equity money which the public utility industries require annually represents little more than simple bookkeeping transactions in so far as the relations between most holding companies and operating companies are concerned. Of course, abuses by individual managements and political attacks may at times undermine the market for holding company securities in general.[1] Similar assaults, of course, affect the credit of operating companies too.

Economies Due to Diversification of Economic Conditions.—In addition to the advantages which come purely from increasing the size of issues sold to the public, the substitution of one issue for the issues of many companies makes that large issue depend upon the properties of several companies. In many cases these properties are subject to different economic condi-

[1] At the current time (1938) the public utility holding companies are still suffering from the attacks leveled against them by the New Deal. Eventually their credit will right itself. Industrial holding companies are functioning normally.

tions. One company may depend chiefly upon the requirements of agricultural communities. Another may supply a primarily manufacturing district. Another may depend chiefly upon mining requirements. The prosperity of these various districts may vary from time to time; but it is not likely that all subsidiary companies will have bad years at the same time or that all will have good years at the same time. Therefore, the total effect of combining several companies is to make the prosperous earnings of one company offset the poor earnings of another company during the various ups and downs in the earnings of the individual companies. For example, the Associated Gas and Electric Company divides its territories into groups. In 1927, one of those groups had a total decline in the output of electricity of approximately 16%. However, the other seven groups showed an increase varying from 4% to 16%. The canceling of one group against another showed a total gain in output for the entire system of more than 6%. Likewise, B. C. Cobb, vice president of the Commonwealth Power Corporation, stated with reference to that corporation that "Business conditions in some sections of the territory served were rather spotty in 1927 but as these conditions were more than offset by favorable situations elsewhere, the corporation had a successful year."

It is evident from the foregoing statements that a single security of holding corporations may represent the same diversification of economic conditions that would be represented if the individual investor purchased securities in the individual subsidiary companies in the same proportions as exist in the holdings of the control company. The wealthy investor is in a position to buy such a diversified group of securities, but the small investor does not have sufficient capital to diversify his investments so extensively. The bringing of equities in many companies under a single security issue of a holding company permits the same diversification that the wealthy capitalist is able to obtain, plus the further advantage that the securities of the holding corporation may be issued in sufficiently small denominations for the small investor to purchase them. The small investor is thereby given the benefit

of diversification that it would not otherwise be possible for him to obtain. By thus giving the small investor a security that represents a broad diversification of underlying economic conditions, the market for the holding company's securities is broadened, and its securities may be sold on a more favorable basis than could the securities of many underlying subsidiary companies. These advantages, of course, presuppose that there are not disadvantages of more than offsetting importance. The validity of this assumption is questionable. This angle of the subject is examined more fully in the chapter on Segregated Risk Financing.

Typical Percentage of Common Stock Ownership.—It is customary for public utility holding companies to own practically all of the common stocks of their subsidiaries. The accompanying chart shows that in the cases of 93% of the subsidiaries listed, the system holding corporation owns substantially all of the common stocks. This chart contains data on 45 of the larger holding corporation systems. It shows the extent of the intra-system common stock holdings only with reference to those subsidiaries for which such information was available in financial statements; but, in most cases, common stock ownership information with regard to all important subsidiaries was available. The policy of owning substantially all of the common stocks of subsidiaries is typical of the public utility industries.

Causes of 100% Control.—The tendency to control practically all of the common stock of subsidiaries is to be explained on several grounds. Of very great importance is the relationship of management to earnings on common stock equity. The earnings on common stock equity are the residue after payment of all operating costs and preferred claims, including interest on bonds and notes and dividends on preferred stock. (This residue fluctuates according to the efficiency or inefficiency of the management.) Hence, since efficient management is arranged for or rendered by the system control company, it is only natural that the control company should seek to reap all the benefits of the efficiency it has made possible.

STOCK OWNERSHIP POLICIES OF HOLDING CORPORATIONS

(Source: *Poor's Public Utilities Manual,* 1927; Company Reports)

Company	Subsidiaries 95% to 100% Owned*	Number of Statements Examined
American Gas & Electric Co.	20	21
American Light & Traction Co.	12	12
American Power & Light Co.	11	15
American Water Works & Electric Co.	77	78
Associated Gas & Electric Co.	41	41
Atlantic Public Utilities, Inc.	8	9
Buffalo, Niagara & Eastern Power Corp.	9	9
Central Public Service Co.	11	25
Central States Power & Light Corp.	7	8
Cities Service Co.	.98.5% of common stock of 192	
Columbia Gas & Electric Corp.	43	43
Commonwealth Light & Power Co.	6	6
Commonwealth Power Corp.	9	9
Consolidated Gas, Elec. Light & Pr. Co.	12	12
Duke Power Co.	13	13
East Coast Utilities Co.	3	3
Eastern Gas & Electric Securities Corp.	2	2
Electric Power & Light Corp.	17	19
Electric Public Service Co.	6	6
Empire Power Corp.	8	8
Engineers Public Service Corp.	12	12
Federal Light & Traction Co.	25	26
General Gas & Electric Corp.	30	33
International Utilities Corp.	2	11
Lehigh Power Securities Corp.	20	23
McGraw Electric Co.	1	1
Middle West Utilities Co.	32	36
Midland Utilities Co.	27	29
Mohawk-Hudson Power Corp.	9	10
Mohawk Valley Co.	1	6
National Electric Power Co.	9	9
National Power & Light Co.	8	9
National Public Service Corp.	19	21
Nevada California Electric Corp.	12	12
The North American Co.	31	36
North American Light & Power Co.	17	18
Pacific Lighting Corp.	4	4
Penn-Ohio Securities Corp.	24	25
Peoples Light & Power Corp.	14	14
Public Service Corp. of New Jersey	13	13
Southeastern Power & Light Co.	12	15
Standard Gas & Electric Co.	64	69
United Light & Power Co.	31	34
United Public Service Co.	5	5
Utilities Power & Light Corp.	8	10

* These percentages are for amounts of stock which are intra-system owned. One corporation does not necessarily own all the stock which is intra-system controlled. The 1926 figures are considered more indicative because they represent a larger number of interests than now exist in the industries.

This it seeks to do by acquiring substantially all of the common stock of companies it controls.

Another factor has been the desire to benefit from financial support which the holding company gives the subsidiary. In times of financial difficulties the holding company frequently comes to the assistance of a subsidiary by making funds available for urgent purposes. In order to protect its own interests, it renders financial aid. In a situation of this type the minority stockholder rests assured that the holding company will protect its own interests, thereby protecting his. However, in these cases, as in others, the holding company seeks to reap all the benefits of its activities by securing ownership of substantially all of the common stocks of subsidiaries.

Technical considerations have been a third factor. Subsidiaries have been organized to meet some specific situation. In such cases, it was to be expected that the agency causing the incorporation would retain the common stock of the new company.

A fourth factor of considerable importance is the desire to avoid minority interference. Theoretically so long as there are minority stock holdings outstanding, the business of the subsidiary must be conducted as the business of an independent corporation. Independent conduct of a corporation imposes hampering restrictions on relationships with the control company, and, above all, offers obstacles to intercompany manipulation. Hence, holding company executives desire to eliminate all minority common stock interests in subsidiaries.

Relationship of Securities to System Earnings and Assets.—Owing to the frequent publication of confused ideas about holding company finance, it seems appropriate at this point to note that holding companies cannot transgress, with impunity, general financial principles. The theory, frequently expressed, that by piling holding company on holding company a system can be bonded much more heavily than could the underlying properties is erroneous. As has been noted under the subject of substitution of securities, to the extent that earnings are regularized by the appropriate combination of

properties with irregular earnings, to that extent additional bonding is made possible. But it must be noted that, that would be possible were a single corporation to own all the individual properties directly. The holding company bonds must depend upon the earnings of the operating properties quite as much as though they were direct obligations of the operating properties. While a pyramid of holding companies gives an appearance of strength to weak bonds, when judged by the same "times interest earned" standards which are applied to operating company bonds, no real economic strength has been added. This appearance of strength may aid bankers in unloading securities on the public, but for long time success the system's securities structure must conform to the same relationships and restrictions which govern the issue of securities by any corporate organization.

To the extent that assets are a factor in the determination of public utility rates, to that extent do the earnings of a system have a direct relationship to the assets. And since the securities structure is dictated largely by the amount and regularity of earnings, the securities structure is modified by the effect of assets on earnings. Hence, the securities structure of the system as a whole must bear a rough relationship to the operating asset structure of the system, though the ineffectiveness of present day regulation makes this relationship very inexact. Of course, industrial holding company financial structures have an even less exact relationship to asset structure.

Analysis of Holding Company Securities Structures.—Much current literature seems to assume that by piling one holding company on top of another considerably more bonds and preferred stock can be issued against the cooperating properties than could be issued in the absence of the pyramided holding company structures. Unfortunately, this is true as a matter of selling securities but not as a matter of sound financial structure. The fact that bonds and stocks have been issued so freely is due to public ignorance and misguidance in these matters. Ignorance in investment analysis is, of course, very widespread; but the building of flimsy pyramided struc-

tures would not have been possible to the same extent if the public had not been definitely educated to unsound investment standards. The chief of these unsound investment standards is the assumption that any bond is good if the earnings of the corporation which issued the bond are twice as great as the interest charges on the bond issue. Scarcely less important is the false assumption that a preferred stock is good if the earnings available for preferred dividends equal two to four times the amount of the preferred dividend requirements. These standards are utterly unreliable as the illustration on pages 350-351 demonstrates.

Certain characteristics of the statements must be explained. (1) The net earnings that are significant from an investment standpoint are those coming out of the pockets of the public. Mere bookkeeping sleight of hand will not support the securities structures permanently. Hence, the only earnings that are important are those of the operating company or companies; and the financial structures of all holding companies are ultimately dependent on them. (2) The figures for the operating companies may be considered to be the figures of a single company or the figures of an aggregate of operating companies. The theory of analysis is the same; but if the earnings derived by the holding companies are made more stable by tying together properties with earnings fluctuations which compensate each other, the times interest earned standard for combined charges may be lowered slightly.

Otherwise, the difference in assumptions is of slight importance. (3) The holding companies are assumed to be pure holding companies, engaged in no business other than the holding of stock of the underlying company or companies. (4) It is assumed that each holding corporation owns 100 per cent of the common stock of its subsidiary company or companies and that the remaining securities are held by the public. (5) Under assumption (4) all bond interest and preferred dividends of each underlying company must be paid before any dividends can be paid on the common stock which the superimposed company owns. Hence, the only earnings of a subsidiary that a holding company can claim are those which

Relationship of Holding Company Securities to Basic Earnings

Statement Items	Income Statements Indicating Method of Treating Equities in Undistributed Earnings of Subsidiaries			Times Interest or Preferred Dividends* Earned Ratios					% of Basic Net Earnings Required to Make Payment	Statements after 10% Shrinkage of Net Earnings of Operating Company or Companies		
				Common Method			Prior Charge Method					
	Included	Excluded	Modified Inclusion	Item Numbers	Statement A Ratios	Statement B Ratios	Item Numbers	Statement A		Method A	Method B	
	A	B	C	D	E	F	G	H	I	J	K	
Operating Company or Companies:												
1. Gross revenues	$25,000,000	$25,000,000	$25,000,000									1
2. Expenses	15,000,000	15,000,000	15,000,000									2
3. Net earnings	10,000,000	10,000,000	10,000,000							$9,000,000	$9,000,000	3
4. Interest	5,000,000	5,000,000	5,000,000	3÷4	2.00	2.00	3÷4	2.00	50.00	5,000,000	5,000,000	4
5. Net to stock	5,000,000	5,000,000	5,000,000							4,000,000	4,000,000	5
6. Preferred dividends	2,500,000	2,500,000	2,500,000	5÷6	2.00	2.00	3÷(4+6)	1.33	75.00	2,500,000	2,500,000	6
7. Net to Holding Co. #1	2,500,000	2,500,000	2,500,000							1,500,000	1,500,000	7
8. Paid to Holding Co. #1	2,200,000	2,200,000	2,200,000							1,500,000	1,500,000	8
9. Surplus	300,000	300,000	300,000									9
Holding Company #1:												
10. Gross earnings	$2,500,000	$2,200,000	$2,200,000							$1,500,000	$1,500,000	10
11. Expenses	25,000	25,000	25,000							25,000	25,000	11
12. Net earnings	2,475,000	2,175,000	2,175,000							1,475,000	1,475,000	12
13. Interest	800,000	800,000	800,000	12÷13	3.09	2.72	3÷(4+6+13+11)	1.20	83.25	800,000	800,000	13
14. Net to stock	1,675,000	1,375,000	1,375,000							675,000	675,000	14
15. Preferred dividends	600,000	600,000	600,000	14÷15	2.79	2.29	3÷(4+6+13+15+11)	1.12	89.25	600,000	600,000	15
16. Net to Holding Co. #2	1,075,000	775,000	775,000							75,000	75,000	16
17. Undistributed earnings of subsidiaries			300,000									17

18. Total net to Holding Co. #2 . .	1,075,000	775,000	1,075,000							75,000	75,000	18
19. Paid to Holding Co. #2	700,000	700,000	700,000							75,000	75,000	19
20. Surplus	375,000	75,000	375,000									20
Holding Company #2:												
21. Gross earnings . .	$1,075,000	$700,000	$700,000							$75,000	$75,000	21
22. Expenses	25,000	25,000	25,000							25,000	25,000	22
23. Net earnings . . .	1,050,000	675,000	675,000							50,000	50,000	23
24. Interest	200,000	200,000	200,000	23÷24	5.25	3.38	3÷(4+6+13+15+24 +11+22)	1.09	91.50	200,000	200,000	24
25. Net to stock . . .	850,000	475,000	475,000							Def.150,000	Def.150,000	25
26. Preferred dividends	100,000	100,000	100,000	25÷26	8.50	4.75	3÷(4+6+13+15+24 +26+11+22)	1.08	92.50			26
27. Net to Holding Co. #3	750,000	375,000	375,000									27
28. Undistributed earnings of subsidiaries			375,000									28
29. Total net to Holding Co. #3 . .	750,000	375,000	750,000									29
30. Paid to Holding Co. #3	300,000	300,000	300,000									30
31. Surplus	450,000	75,000	450,000									31
Holding Company #3:												
32. Gross earnings . .	$750,000	$300,000	$300,000									32
33. Expenses	25,000	25,000	25,000									33
34. Net earnings . . .	725,000	275,000	275,000									34
35. Interest	100,000	100,000	100.000	34÷35	7.25	2.75	3÷(4+6+13+15+11 +22+24+26+35 +33)	1.07	93.75			35
36. Net to stock . . .	625,000	175,000	175,000									36
37. Preferred dividends	50,000	50,000	50,000	36÷37	12.50	3.50	3÷(4+6+13+15+11 +24+26+35+22 +37+33)	1.06	94.25			37
38. Net to common stock	575,000	125,000	125,000									38
39. Undistributed earnings of subsidiaries			450,000									39
40. Total net to common stock	575,000	125,000	575,000									40

are over and above such prior charges. Further, the earnings actually paid into the holding company constitute only that portion of the earnings, available for common stock, which is actually paid out in dividends by the subsidiary company. However, this qualification is of little significance since holding companies can compel their subsidiaries to pay their entire earnings out as dividends. On occasion, they compel them to pay dividends out of accumulated surplus. (6) $25,000 has been allowed for holding company administrative expenses. This amount is purely arbitrary; but since the holding companies are primarily bookkeeping establishments, operating expenses are merely nominal. (7) No allowance has been made for penalty income taxes on holding companies.

Interpretation of Illustration.—The statements in columns *A, B,* and *C* are samples of procedure used in arriving at three types of statements employed by holding companies. Practically no published statements, of course, show the underlying structure as shown here; but the basic procedure is the same. The economics of all three illustrations are the same, but the method of setting up the facts differs.

Looking now to the "times interest or preferred dividends earned ratios," it is apparent that the method of accounting makes marked differences in the ratios. The ratios of column *C* may be identical with those of either *A* or *B,* depending upon the treatment of undistributed surplus of subsidiaries. Further, the common methods of computation shown in column *D* give a very strong appearance to the bonds and preferred stocks of the holding companies. In fact, the securities look stronger as they become weaker. This strong appearance results from taking each company by itself without regard to the prior charges of underlying companies. In the case of preferred dividends, the strong appearance results also from considering only the ratio of the amount immediately available for preferred dividends to those dividends. Were even the bond interest charges of the individual company combined with preferred dividends to see how securely the charges were earned, the results would be vastly different. Yet

this method of calculating the coverage of bond interest and preferred dividends is used very generally by statistical services, bond houses, and holding corporations themselves.

Obviously, the bonds of each holding company are little better than the common stock of the company immediately underlying them, their superiority depending upon the amount of bonds in comparison with the amount of common stock supporting them. They are distinctly inferior to the preferred stock of the subsidiary company. The preferred stock of the holding companies may be better or worse than the common stock of the company immediately underlying it, depending upon the amount of bonds with prior claim to the earnings on the common stock and also depending upon the amount of preferred stock in comparison with the amount of subsidiary company common stock supporting it. In the illustration, the returns on all securities of Holding Company #2 and Holding Company #3 are clearly less safe than is the return on the common stock of the operating company, as columns *J* and *K* show.

The proper way to test these securities is found in columns *G, H,* and *I.* The prior charge method, as indicated by formulas in column *G,* consists of comparing the amount of all charges, prior to and including the charges on the security under investigation, with the amount of the basic net earnings (of operating properties) available to meet those charges. In this way the fiction of the separate corporate structures is eliminated, and the group is treated as the single economic unit which it is. Column *H* shows the "times earned ratios" on a combined charge basis. Although this is the most common way of showing the strength of securities, the author prefers the method shown in column *I.* This column shows the percentage of basic net earnings of operating companies required to make the payment on the particular security possible. Thus, at a glance, one can tell the percentage of shrinkage that can take place in basic net earnings before the charges on the particular issue are impaired. For example, a 6% shrinkage of operating company net earnings will impair the preferred dividends of Holding Company #3; a 10% shrinkage will

make it impossible to meet the payments on any securities of Holding Company #2 and Holding Company #3.

At the beginning of this discussion, it was stated that the piling of one holding company upon another did not make it safe to issue amounts of bonds which were greatly in excess of the amounts that could be safely issued in the absence of such holding company structures. It is now apparent that if it is not safe to issue bonds carrying interest charges in excess of one-half the net earnings of the operating company, the presence of a pure holding company does not alter that situation materially. A 50% shrinkage of net earnings of an operating company is just as dangerous under one structure as under another. The pure holding company can safely issue more bonds only if its subsidiaries have compensating fluctuations in earnings, that is, the good earnings performance of one subsidiary offsets the bad earnings performance of another. Even so, added stability of earnings does not warrant marked enlargement of bonded debt.

A purely hypothetical set up has been given. Usually, holding companies do not give full information concerning subsidiaries and sub-holding companies; so the analyst is left with fragmentary materials to work with. However, a properly constructed consolidated earnings statement will ordinarily give some basis for conclusions concerning securities of the company with which it deals. The example, page 355, is a more than ordinarily complete statement. But, like most statements of the public utility holding corporations, it overstates the financial strength of the issues by failing to charge out depreciation along with maintenance expense. In the long run, depreciation must be met in the same way that any operating expense is met; hence, it should be deducted ahead of the charges on all security issues in determining the strength of such issues.

Pyramiding.—The pyramiding of the type illustrated has little to commend it. The advantages of holding companies that have been discussed in previous sections can all be obtained by a simple holding company structure. Most of them can be obtained by a single holding company controlling all under-

CONTINENTAL GAS & ELECTRIC CORPORATION *

TO THE STOCKHOLDERS:

Your Board of Directors submits herewith a report of the operations of your Company for the year ended December 31, 1927.

The following Comparative Consolidated Earnings Statement indicates the progress that has been made during the year:

COMPARATIVE CONSOLIDATED EARNINGS STATEMENT

TWELVE MONTHS ENDED DECEMBER 31:	1927	1926
GROSS EARNINGS, Subsidiary Companies	$29,783,087.92	$26,750,485.94
LESS: General Operating Expense	12,396,202.38	10,949,884.70
Maintenance Chargeable to Operation	1,754,355.12	1,628,040.11
Taxes, General, Federal and Income	2,278,891.32	2,270,649.61
TOTAL OPERATING EXPENSE	16,429,448.82	14,848,574.42
OPERATING PROFIT	$13,353,639.10	$11,901,911.52
DEDUCT: Interest and Dividends on Bonds, Notes and Preferred Stocks of Subsidiary Companies owned by the Public	4,309,213.08	3,875,216.00
Profit Applicable to Minority Interest	129,069.11	86,199.75
EQUITY OF CONTINENTAL GAS & ELECTRIC CORPORATION	$ 8,915,356.91	$ 7,940,495.77
CONTINENTAL GAS & ELECTRIC CORPORATION:		
Expenses	143,643.53	108,969.62
Less INCOME: Interest on Bank Balances	18,536.22	8,900.94
Miscellaneous	1,654.75	8,436.89
BALANCE Before Interest Charges, Depreciation and Bond Discount Amortization	$ 8,791,904.35	$ 7,848,863.98
INTEREST PAID:		
On Funded Debt:		
(a) First Lien Col. Trust S. F. 5% Bonds, due Nov. 1, 1927	159,210.82	194,630.46
(b) Refunding Mortgage 6% Bonds, due April 1, 1947	245,754.00	1,327,672.00
(c) Col. Trust 7% G. B., Series "A", due February 1, 1954	83,811.83	157,887.63
(d) Secured 6½% Bonds, Series "A", due October 1, 1964	760,500.00	760,500.00
On Commercial Loans	121.06	29,449.40
On Obligations to The United Light & Power Co.	413,781.81	181,175.35
TOTAL DEDUCTIONS	1,663,179.52	1,651,314.84
BALANCE AVAILABLE FOR DEPRECIATION, BOND DISCOUNT AMORTIZATION AND DIVIDENDS ON STOCKS	$ 7,128,724.83	$ 6,197,549.14
PREFERRED STOCK DIVIDENDS:		
7% Prior Preference	825,646.50	822,923.50
(e) 6% Preferred	565.50	2,839.50
(d) 6-8% Participating Preferred	513,049.43	426,698.37
TOTAL PREFERRED STOCK DIVIDENDS	1,339,261.43	1,252,461.37
SURPLUS EARNINGS AVAILABLE FOR DEPRECIATION, AMORTIZATION AND COMMON STOCK DIVIDENDS	$ 5,789,463.40	$ 4,945,087.77

NOTES: (a) These Bonds Paid at Maturity. (b) Called for Redemption October 1, 1927. (c) Called for Redemption February 1, 1928. (d) Called for Redemption April 1, 1928. (e) Called for Redemption January 2, 1928.

* *Annual Report, 1927*, p. 23. Since the several bond issues were replaced with a single issue later statements of the company do not serve our purpose so well as this.

lying companies directly. Only in case business risks are to be segregated or the liability of stockholders limited is it necessary to have two layers of holding companies. In some cases, the historical development of the holding company structures has made pyramiding necessary. For example, in 1926 the North American Company controlled the East St. Louis and Suburban Company. This company in turn controlled, directly and indirectly, eight other companies. It has been stated that the operating companies were controlled through East St. Louis and Suburban Company rather than directly because the controlling stocks of the operating companies were pledged to secure the funded debt of East St. Louis and Suburban Company; this arrangement makes it necessary to redeem the debt in order to release them. In this instance the pyramid was defensible. But deliberately constructed pyramids are open to the suspicion of existing for no good purpose. Such pyramids now (1938) operate under the handicap of discriminatory taxation. The Federal Revenue Act subjects dividends received from subsidiaries to additional taxation in the hands of the holding company. Hence, the larger the number of layers of holding companies, the larger the tax burden.

Death Sentence.—Section eleven of the Public Utilities Act of 1935 was popularly called the "death sentence" to holding companies. It lodged tremendous discretionary power in the Securities and Exchange Commission with respect to the forced elimination of intermediate holding companies thereby limiting pyramiding. This act was drafted to cover only interstate public utility holding companies. It does not reach industrial, railroad, or bank holding companies. Nor does it apply to foreign countries.

The Financing Function.—Holding companies, particularly in the railroad and local public utility fields, frequently play the rôle of financing companies; that is, they provide the funds with which their subsidiaries extend their properties and purchase additional equipment. The method of operating as a financing company involves the accumulation of a large working capital through sale of securities or retention of earnings.

Funds are then advanced for temporary periods to individual operating properties. These advances may be made on unsecured open account or may be made in the form of loans secured by pledge of securities of the operating subsidiaries. When the advances have reached sizable proportions, the operating subsidiary brings out a bond issue or other security issue and uses the proceeds to repay the advances. The holding company then has funds with which to repeat the process.

This method of financing operating companies gives rise to several advantages and economies, though the benefit of the economies is not necessarily passed on to the operating companies. These advantages and economies may be listed under five heads: (1) avoidance of delay in authorizing the issue of new securities, (2) avoidance of piecemeal financing, (3) freedom in choosing the time of bringing out security issues, (4) better banking connections, and (5) better meeting of calamities.

The use of a finance company avoids delays in authorizing security issues when it is necessary to secure stockholder ratification of a change in capitalization. The facilities may be purchased first and the change in capitalization ratified afterward. Ordinarily, though, the holding company would control enough of the voting stock of the subsidiary to secure ratification without trouble.

The holding company acting as a finance company avoids piecemeal financing on the part of subsidiaries by advancing small sums of money over considerable periods of time. In this way the subsidiaries are not obliged to bring out small issues of securities, but can wait until the advances are sufficiently large to warrant large issues. In this way financing costs are cut down, since the costs of selling large issues are much less per dollar obtained than are the costs of selling smaller issues.

Similar to the advantage in bettering the size of security issues is the advantage of being able to fit the time of issue to money market conditions. Very frequently the money market is not in condition for the issue of a given security to best advantage. In this case, temporary financing can be done

through the holding company. Later, when conditions are more favorable, the advances may be paid back. However, it will be noted that this method is not a device without limits, for the holding company is not in a position to extend advances indefinitely and in ever increasing amounts.

The holding company frequently has an advantage over the individual operating company in seeking investment banking and commercial banking services. This advantage follows chiefly from the fact that the holding company represents a whole system of companies; whereas the individual company stands alone. Hence, the holding company has greater bargaining strength.

In time of calamity the borrowing power of the holding company is a source of considerable economy in subsidiary company financing. Public utility companies are occasionally severely damaged by floods, tornadoes, earthquakes, fires, and the like. For the time being, their credit is greatly impaired. In some cases they are unable to obtain accommodation; in other cases the accommodation is exceedingly costly. At such times, since its credit is only slightly affected by the troubles of a single subsidiary, the holding company can still obtain funds on economical terms. It can then advance the funds necessary to put the operating company back on its feet. After the subsidiary is rehabilitated, it can issue its securities on better terms and repay the holding company.

The Assumption Function.—The holding company acting as an assumption company issues its own securities against an assortment of securities of other companies. It was formerly customary to pledge the securities in the holding company's portfolio as security for collateral trust bond issues; but at present there is a tendency to issue unsecured debentures of the assumption company. This change of policy gives greater latitude in substitutions of portfolio. Under the changed procedure, the assumption company assimilates the investment trust. Assumption companies have been used chiefly as a means of marketing small security issues which have been taken in payment for services or equipment. For example, in the early

history of the electric light and power industry, electric plants found it very difficult to sell their securities to the public. However, in order to make sales of electrical equipment to the operating companies, the equipment manufacturers took their pay in securities of the local companies. This procedure tied up large amounts of working capital of the manufacturers. Hence, it was necessary to find some way of disposing of the securities. The assumption company proved a solution to the difficulty, since the public would buy a security based upon a diversified list of securities of local plants when it would not buy the individual securities. General Electric Company used this device when it caused the incorporation of Electrical Securities Corporation in 1904. The large engineering firms have also resorted to it, notably Stone and Webster, Inc. However, pure assumption companies are not now common in the public utility industries, but the assumption function is performed along with many other functions by the system control companies.

Direct versus Indirect Financing.—In cases of consolidation by holding companies, two methods of financing are possible. One method is to finance subsidiary companies directly by selling their securities (other than common stocks) to the public. The other is to finance those companies indirectly through the instrumentality of a holding corporation. In the latter case the holding corporation holds the securities of the subsidiaries and sells to the public an issue of its own securities based on the sum of its equities in the various companies. For example, only nine of the 64 companies in the old Republic Railway and Light Company system had securities outstanding in the hands of the public in 1926.

During the decade 1920 to 1930 the public was deluged with propaganda concerning the alleged merits of large-scale indirect financing and of large-scale direct financing. Certain financiers favored indirect financing, notably those promoting the Associated Gas and Electric system. Others favored direct financing by operating companies. This was a period of rapid growth of local public utility companies and of more rapid

growth in outstanding public utility securities. The public appetite for securities was so great that both schools of thought sold their securities readily. Although the 1929-1937 period of financial shake-out has thrown much light on the relative weight of the arguments, it is well to examine the different points of view.

Indirect Financing.—The argument for indirect financing ran as follows: In many cases it is uneconomical to sell the securities of small subsidiaries to the public. Because of their size the security issues of small direct property owning companies cost more to underwrite per dollar obtained and are less marketable, less valuable as collateral, and less confidence inspiring than are those of large companies. Necessarily, few people are interested in them. They are not widely known. Their values are not familiar. Consequently, they can be sold only at a yield which makes the cost of capital greater than it would be for large direct issues. These objections to small issues are overcome by large indirect issues which represent the needs of several companies. In addition, indirect issues offer the important advantage of being backed, not by the individual properties separately, but by the small properties collectively, thereby giving the indirect issues the support of diversified economic conditions.

But on the other hand, indirect issues offer an important obstacle to cheap financing: viz., the difficulty of ascertaining the value supporting the securities of the holding corporation. If the investor is to form a judgment of the soundness of securities, he must investigate the condition of all the subsidiary companies, and must ascertain the equities of the holding corporation in each company whose securities it holds. This task would be enormous if the information needed were available, but very rarely is sufficient information given.

Direct Financing.—The direct financing theory can be brought out by the cases of Public Service Corporation of New Jersey and Electric Bond & Share Company. In 1924, Public Service Corporation of New Jersey amalgamated its subsidiary electric and gas properties and changed its policy

from that of financing those properties entirely through the holding corporation to that of financing them directly. In defending this new financial structure before the New Jersey Board of Public Utility Commissioners, Mr. Thomas S. Gates, of the banking firms of Drexel & Company and J. P. Morgan & Company, testified as follows:

> The problem we had to meet was simply this: From the banking standpoint simplicity is the desideratum. You must have your corporate structure simple in order to get the investor, so there is no mystery and he knows exactly what he is buying. Therefore, the first thing we thought of, the first thing to do was to merge, if you could, that portion of the underlying electric property which was given over to the distribution of electricity and that which was given over largely to the generation of electricity in Public Service Electric Company's grounds, namely, the Public Service Electric Company and the United Electric, and the gas company and by merging those two you simplify, you have a gas and electric company which covers the activities of the state. That is very simple. Now, then, to create a mortgage against that, gives you something that an investor understands, consequently he will pay a better price and the corporation correspondingly will get a better price for itself, a lower rate.[2]

The financing methods of other companies also leaned in this direction, notably that of the Electric Bond & Share Company.

> The plan of financing as developed by the Electric Bond & Share Co. contains, it is stated, four important features—viz.: (1) the formation of holding companies, each to take the common stocks, including the voting control, of an extensive list of operating companies; (2) the merger of many operating companies in a particular region into a single operating company whose area of operations, volume of business, and earnings would be large enough to gain prestige with the investing public and render the company's bonds and preferred stocks easily salable to the public on favorable terms; (3) the use of a plan of financial structure in which from 50% to 60% of the funds invested in the operating companies would be represented

[2] P. U. R. 1924E, p. 247. The following testimony is pertinent: "It is difficult to put it, sir, in a question of 1% or 2%, but as a matter of years I should think that the difference between the possibilities of developing if this plan went through and if it did not go through would be certainly 2%." P. 249.

by debentures or mortgage bonds of those companies, about one-half of the remainder by their preferred stocks, and the balance by common stock to be taken by the holding company; and (4) the avoidance of closed mortgages and closed debenture agreements and the use instead of instruments that provide very large reserves of bonds for future needs.[8]

Even before the exposures of 1929-1938, most of the larger holding corporation systems permitted the bonds and preferred stocks of their larger subsidiaries to be sold directly to the investing public. In cases in which direct financing is undertaken, the only way to secure the economies of large issues of securities is to consolidate subsidiaries by direct ownership of property. Hence the expected economies of direct financing on large direct property owning units is an important factor in the movement toward consolidation by direct ownership of properties.

Non-financing Motives for Operating Consolidations.—It is probable that financing considerations alone, even in a rapidly growing industry, would not involve savings large enough to warrant the expenses of consolidating small operating subsidiaries into large companies. But if economies from other sources can be added to the savings obtainable through large-scale direct financing, the total effect may be favorable to direct property owning consolidation and direct financing. Thus where consolidations are effected by stock control of corporations, each company must run its own business, elect its own officers and directors, keep separate corporate records and books of account, pay taxes, and make reports required by law. In addition, supervision by the management organization is complicated by the multiplicity of reports and of administrative details required for operating purposes. Elimination of duplications of this character are often credited with marked economies. Thus President Barrows of the Narragansett Electric Lighting Company stated, in 1925, that by the formation of the South County Public Service Company, economies would be brought about "by a concentration of purchasing,

[8] *Control of Power Companies*, p. xxvii.

bookkeeping and maintenance of line crews" which would make it possible to reduce "lighting rates about one cent per kilowatt-hour." The opportunities for personal gain from "write-ups" accompanied by issuing securities on the inflated values has been amply covered in previous chapters.

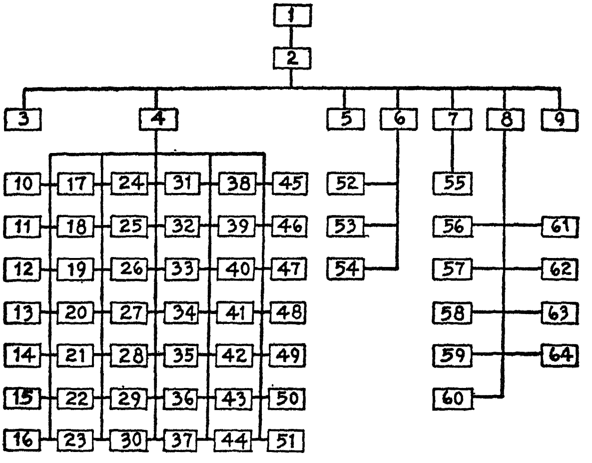
Simplification.—The process of reducing the number of companies in a holding company system is known as simplification. Whether the motives for simplification embrace financing economies, operating economies, or evasion of punitive taxes and regulation, the methods are the same. In exceptional cases a holding company is dissolved and the securities that it holds distributed to its stockholders. But usually a number of companies in a system are consolidated by direct ownership of properties. Historically most of the large corporations of today have reached their present status as a result of mergers, amalgamations, and purchases of total assets. Most of these direct property owning consolidations have been preceded by consolidations by stock control. With unified financial control major simplifications can be effected rapidly. Scores of subsidiaries can be eliminated in a brief major operation. The charts, pages 364-365, show how the old Republic Railway and Light Company system was both simplified and pyramided.

Simplification of Industrials.—Industrials simplify structures and organizations in like manner. The following announcement was made with regard to the recasting of the structure of the United States Steel Corporation system:[4]

In accordance with a program of decentralization, the United States Steel Corporation is planning to recast its subsidiaries along geographical lines, abandoning the present division, which is on the basis of products.

The plan, which may be carried forward step by step, would provide for the formation of five or six new subsidiaries, each of which would take over all the plants of the corporation in its region. Thus, a new Pittsburgh subsidiary would absorb the plants and activities in that region of the Carnegie Steel Company, the American Sheet and Tin Plate Company, the National Tube Company and the

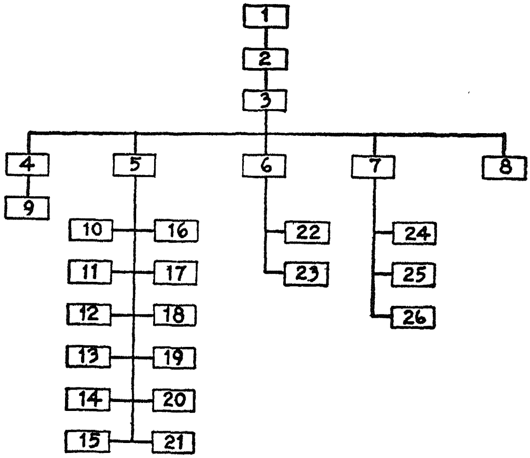
[4] *New York Times,* December 6, 1933, p. 35.



1. Republic Railway & Light Co.
2. Penn.-Ohio Edison Co.
3. Zelienople Light & Pr. Co.
4. Penn.-Ohio Electric Co.
5. Salem Lighting Co.
6. Pittsburgh District Electric Co.
7. Ohio River Edison Co.
8. Penn.-Ohio Power Co.
9. East Ohio Power & Light Co.
10. East End Traction Co.
11. West End Traction Co.
12-38. 27 township lighting co's.
39. Beaver-No. Sewickley Power Co.
40. Beaver-Franklin Power Co.
41. Lawrence-Wayne Power Co.
42. New Castle & Lowell Realty Co.
43. Youngstown Municipal Ry. Co.
44. Pa. & Mahoning Valley Ry. Co.
45. Penn.-Ohio Coach Lines
46. Akron-Youngstown Bus Co.
47. New Castle & Mahoningtown Ry.
48. New Castle Elec. St. Ry.
49. New Castle & Lowell Ry. Co.
50. New Castle Electric Co.
51. New Castle Traction Co.
52. Nercer Co. Lt., Ht., & Pr. Co.
53. Kinsman Electric Co.
54. Boston Mining Co
55. Ohio River Transmission Co.
56. Shenango Valley Elec. Lt. Co.
57. Sharon Gas & Water Co.
58. Mahoning County Light Co.
59. Shenango Valley Traction Co.
60. Pennsylvania Power Co.
61. Sharon & New Castle St. Ry.
62. Sharon & New Castle Ry. Co.
63. North East Coal Co.
64. Idora Park Co.

Figure 23. Republic Railway and Light Company System before Simplification

(Source: *Electrical World,* 89 : 1193)



1. Penn.-Ohio Securities Corp.
2. Republic Railway & Light Co.
3. Penn.-Ohio Edison Co.
4. Ohio River Edison Co.
5. Penn.-Ohio Electric Co.
6. Pennsylvania Power Co.
7. Penn.-Ohio Power & Light Co.
8. New Castle & Lowell Realty Co.
9. Ohio River Transmission Co.
10. East End Traction Co.
11. West End Traction Co.
12. Youngstown Municipal Ry.
13. Pa. & Mahoning Valley Ry. Co.
14. New Castle & Lowell Ry. Co.
15. New Castle Elec. Street Ry.
16. Pa.-Ohio Coach Lines
17. Akron-Youngstown Bus Co.
18. Cleveland & Mahoning Valley Coach Co.
19. H. A. K. Bus Co.
20. Penn.-Ohio Tourist Co.
21. Youngstown Gas Co.
22. Elwood City Hydro-Electric Co
23. Boston Mining Co.
24. Shenango Valley Traction Co.
25. North East Coal Co.
26. Mahoning County Light Co.

Figure 24. Republic Railway and Light Company System after Simplification

(Source: *Electrical World,* 89:1193)

American Bridge Company, all of which are operating subsidiaries of United States Steel.

Other regional subsidiaries probably would be established under the plan in Birmingham, Chicago, the Far West, the East and possibly Cleveland. The Eastern division would include plants at Worcester, Trenton and the Philadelphia area. The Far West would take in the Columbia Steel Company and various subsidiaries that are active on the Pacific Coast. The Chicago division would embrace the vast works at Gary, Ind.

For two or three years the corporation has been slowly moving in the direction of regional consolidation. Several months ago a plant of American Steel and Wire in the Birmingham district was taken over by the Tennessee Coal, Iron & Railroad Company. Similar consolidations have been effected in the interest of greater efficiency in Ohio and other steel-producing centres.

Reconstitution of the corporation on geographical lines would result in greater operating efficiency by elimination of much duplication. Where several plants are in one region, each of which is operating at a low rate of capacity, it may be possible to concentrate operations more easily in the most efficient plant. Another advantage would be the time saved in allowing each regional head to make decisions on operations that have required the approval of committees or executives in New York.

Financing Simplification.—Under simplifications brought about by merger, amalgamation, and purchase of assets the debts of the old companies are usually assumed to avoid the expense of refinancing them; and stock is exchanged for stock. It is customary for the successor corporation to impose a new open-end mortgage on all the properties and do future financing through this vehicle. As the old underlying issues are paid, the new mortgage gradually becomes a first lien on all the properties.

It is ordinarily considered undesirable to eliminate the old issues at the time of consolidation because they would usually have to be called at a premium. This expense added to that of selling the refunding bonds makes refunding unattractive except where the new company can sell long-term bonds at much lower rates of interest than those being paid on the underlying issues.

Refunding.—The problem of whether or not to refund comes up very frequently in connection with consolidations. Assuming that position in the business cycle and condition of the security markets are such that no more favorable times can be expected later, the problem is largely one of mathematics. The vital questions are: will the future payments on a new refunding issue be smaller than those on the old issue? If so, will they be sufficiently smaller to make refunding worth while? This problem can be solved by comparing the respective future payments as explained in the chapter on extinction of bonds.

Dismemberment of Corporate Businesses.—Holding corporation relationships frequently arise for temporary periods when parts of a corporate enterprise are segregated. The procedure giving rise to holding corporation relationships is as follows: A new corporation is formed to take over part of an existing business. Then the properties are transferred to the new corporation, and the parent corporation takes the securities of the new corporation in exchange. If the process is to result in complete dismemberment of the properties, the stock of the new corporation is either distributed to the stockholders of the original corporation or transferred to other interests, for a consideration.

A good illustration of this procedure in the public utility field is the case of the dismemberment of the Commonwealth Power, Railway and Light Company during the period 1922-1924. The procedure in this instance was as follows: The Commonwealth Power Corporation was organized in 1922 to assume control of the traction companies of the same holding corporation. After these sub-holding companies had been formed, they delivered their securities to the Commonwealth Power, Railway and Light Company in exchange for the stocks of the various operating companies which they were to control. Then Commonwealth Power, Railway and Light Company distributed the common stocks of the Commonwealth Power Corporation and the Electric Railway Securities Corporation to its stockholders and dissolved its own corporate

existence. Thus the traction properties and the electric power properties were placed in separate holding corporation systems.

Financial Structure for Temporary Holding Corporation Relationships.—The financial structures of temporary holding corporations have no great uniformity. If the corporation is designed merely as an intermediate holder of securities, then a simple common stock structure containing one share for each share to be acquired will be sufficient. If a more complicated transaction is to be put through, the structure must provide the types and quantities of securities to be exchanged. However, if the company is to sell securities to the public for cash and then accumulate the control of companies by cash purchases, the securities structure must provide those types which the investing public prefers. In short, each structure is conditioned by the nature of the transaction to be consummated.

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CHAPTER 22

CONSOLIDATED STATEMENTS

Introduction.—The theory underlying consolidated statements is as follows: the basic financial relationships of any business institution are with the public. Its earnings must come from the public. They are then paid back to the public in the form of interest and dividends. No intermediate bookkeeping will change this fundamental over-all relationship. Economically, a business which is divided into several separate corporate departments is to be treated as a unit for purposes of showing the position of the controlling corporation. Hence, all intercompany profits and losses and all intercompany debts and loans are to be eliminated so that the statements will show solely relationships with the public. This practice, together with some criticisms, is set out in the subsequent sections.

Eliminations.—In order to show the system as a single unit, all items which do not represent relationships with the outside public must be eliminated from the consolidated statements. The items eliminated may be placed in the following four groups:

1. All assets which represent claims against other companies in the system: for example, intercompany held accounts receivable, notes receivable, bonds, and stocks.
2. All liabilities which represent assets of other companies in the system: for example, intercompany held accounts payable, notes payable, bonds payable, and outstanding stock.
3. All intercompany profit items from inventories and other assets: for example, when inventories of one company in the system have been acquired from another company in the system and have not been sold to the public, the

(Form for Eliminations in Consolidated Balance Sheets)

DETAILED BALANCE SHEETS OF HOLDING COMPANY AND TWO OPERATING SUBSIDIARY COMPANIES, DECEMBER 31, 1919

(Source: Adapted from H. G. Guthmann, *Analysis of Financial Statements,* 1925, p. 407)

	Co. A	Co. B	Co. C	Combined	Eliminations	Cleared
ASSETS:						
Cash	$150,200	$ 66,800	$ 46,100	$ 263,100		$ 263,100
Inventories		311,600	198,400	510,000		510,000
Accounts Receivable Special		12,000	15,000	27,000	$ 27,000	
Prepaid and Deferred Charges	20,000	38,700	19,200	77,900		77,900
Advances to Subsidiaries	60,000			60,000	60,000	
Plant and Equipment		275,000	154,800	429,800		429,800
Investment in Company B (stock at par)	175,000			175,000	175,000	
Investment in Company C (stock at par)	200,000			200,000	200,000	
Investment in Company A (stock at par)		25,000		25,000	25,000	
Investment in Company B (bonds at par)	30,000			30,000	30,000	
Total	$635,200	$729,100	$433,500	$1,797,800	$517,000	$1,280,800
LIABILITIES:						
Current Liabilities	$ 54,000	$265,000	$152,000	$ 471,100		$ 471,100
Owing to Company C		15,000		15,000	$ 15,000	
Owing to Company B			12,000	12,000	12,000	
Advances from Company A		25,000	35,000	60,000	60,000	
Bonds Payable		50,000		50,000	30,000	20,000
Capital Stock	500,000	300,000	200,000	1,000,000	400,000	600,000
Surplus	81,200	74,100	34,400	189,700		189,700
Total	$635,200	$729,100	$433,500	$1,797,800	$517,000	$1,280,800

(Form for Eliminations in Consolidating Income Statements)

COMPANY A AND SUBSIDIARIES B AND C

CONSOLIDATED PROFIT AND LOSS STATEMENT—WORKING PAPERS FOR THE YEAR ENDING DECEMBER 31, 1921

(Source: H. A. Finney, *Principles of Accounting*, 1930, vol. 2, ch. 53, p. 10)

	Co. A	Co. B	Co. C	Eliminations	Consolidated P. & L.
Gross Sales	$300,000	$225,000	$120,000	$170,000 (A)	$475,000
Less Returned Sales and Allowances	3,000	2,000	1,000		6,000
Net Sales	297,000	223,000	119,000		469,000
Less Cost of Goods Sold	215,000	175,000	80,000		303,000*
Gross Profit on Sales	82,000	48,000	39,000		166,000
Less Selling Expenses	23,000	22,000	15,000		60,000
Net Profit on Sales	59,000	26,000	24,000		106,000
Less General and Administrative Expenses	22,000	11,000	3,000		36,000
Net Profit on Operations	37,000	15,000	21,000		70,000
Add Miscellaneous Income:					
Rent of Equipment to Co. B	3,000			3,000 (B)	
Bond Interest from Co. C		2,000		2,000 (C)	
Total	40,000	17,000	21,000		70,000
Less Bond Interest Paid	6,000		2,500	2,000 (C)	6,500
Net Profit for the Year	$34,000	$17,000	$18,500		$63,500
Minority Interest:					
Company B (10%)		1,700			
Company C (20%)			3,700		
Total					5,400
Holding Company's Earnings					$58,100

* As determined in separate schedule of eliminations.

profit of the selling company should be deducted from the inventories in valuing them for the system as a whole.

4. All intercompany income statement items. These items which it is conventional to eliminate from the consolidated income statement include intercompany sales, intercompany profits on merchandise still in inventories, interest, royalties, rent, management fees, dividends, and other expenses of one company which represent income to another in the system. As will be pointed out in a subsequent section, this practice could well be modified in some particulars in order to give the investment analyst certain necessary information.

Minority Interests.—Holding corporations do not always own all of the common stock of subsidiary companies. When this is the case, it is necessary to show the interest of outsiders on both the consolidated income statement and the consolidated balance sheet.

In the income statement the minority interest is usually shown as a deduction prior to the equity of the holding corporation in the earnings of subsidiaries. This method is illustrated by the following statement of Associated Gas & Electric Corporation.

This method is not satisfactory unless it is thoroughly understood. The minority interest in the earnings of subsidiaries is not prior to the holding company interest but is on the same footing; that is, both majority and minority interests rank equally. Hence in case of shrinkage both will shrink proportionally; and in case of increase, both will increase together. The minority interest does not have a prior claim.

In the consolidated balance sheet the minority interest is likewise shown as a separate item. But here the placement of the item does not ordinarily lead to confusion. The only point to bear in mind is that the minority interest amount should include both the stated amount of the minority stock and the equity of those shares in the surplus of the subsidiaries. This is the general basis for presenting the statement. However, occasionally the equity in surplus is not indicated on the bal-

Associated Gas and Electric Corporation

Statement of Consolidated Earnings

12 Months Ended Sept. 30—	1937	1936	Increase Amount	Increase %
Operating revenues:				
Electric — Residential	$38,362,321	$34,361,426	$4,000,894	11.6
Power	27,772,435	24,680,796	3,091,639	12.5
Commercial	20,903,204	18,270,678	2,632,526	14.4
Municipal	7,330,784	6,706,185	624,599	9.3
Electric corporations	4,099,655	4,330,688	a231,033	a5.3
Railways	743,276	795,786	a52,510	a6.6
Total sales—Electric	$99,211,675	$89,145,560	$10,066,115	11.3
Miscellaneous electric	806,874	787,356	19,517	2.5
Total electric revenue	$100,018,549	$89,932,916	$10,085,633	11.2
Gas — Residential	10,002,822	9,958,982	43,839	.4
Commercial	1,909,952	1,836,934	73,018	4.0
Industrial	1,444,224	1,310,282	133,942	10.2
Total sales—Gas	$13,356,999	$13,106,199	$250,799	1.9
Miscellaneous gas	105,098	226,717	a121,619	a53.6
Total gas revenue	$13,462,098	$13,332,917	$129,181	1.0
Miscellaneous—Transportation	6,258,019	5,258,347	999,671	19.0
Heating	1,596,303	1,438,731	157,571	11.0
Water	1,299,369	1,286,929	12,440	1.0
Ice	1,287,634	1,216,258	71,376	5.9
Total miscell. revenue	$10,441,327	$9,200,267	$1,241,059	13.5
Total operating revenues	$123,921,974	$112,466,101	$11,455,873	10.2
Operating expenses	53,500,657	48,442,317	5,058,340	10.4
Maintenance	9,126,394	9,617,466	a491,071	a5.1
Prov. for taxes (incl. Fed. income taxes)	15,325,187	10,975,033	4,350,154	39.6
Net operating revenue	$45,969,734	$43,431,284	$2,538,450	5.8
Provision for retirements	11,143,943	8,261,759	2,882,184	34.9
Operating income	$34,825,791	$35,169,525	a$343,733	a1.0
Non-oper. revs. and expenses:				
Interest, dividends, &c.	$2,093,299	$2,073,649	$19,649	.9
Expenses	*Dr*208,003	*Dr*174,147	33,856	19.4
Non-operating income	$1,885,295	$1,899,502	a$14,206	a.7
Gross income	$36,711,087	$37,069,027	a$357,940	a1.0
Fixed charges and other deductions of subs.:				
Interest on funded debt	$18,339,277	$17,522,314	$816,962	4.7
Interest on unfunded debt	1,207,249	1,129,815	77,434	6.9
Int. charged to constr. (*Cr.*)	115,859	56,608	a59,251	a104.7
Amort. of debt disc. & exp.	1,427,129	1,393,064	34,064	2.4
Divs. on pref. stocks paid or accrued	4,517,358	4,200,391	316,966	7.5
Minority interest in net earnings	173,600	22,273	151,327	679.4
Total	$25,548,756	b$24,211,251	$1,337,504	5.5
Balance	$11,162,331	$12,857,775	a$1,695,444	a13.2
Corporation interest, &c.:				
8% bonds, due 1940	$659,034	$687,201	a$28,167	a4.1
Conv. debs., due 1973	1,468,051	1,911,096	a443,044	a23.2
Income debentures, due 1978	4,058,145	3,413,219	644,926	18.9
Amort. of debt disc. & exp.	74,082	84,488	a10,406	a12.3
Balance, corporation	$4,903,017	$6,761,769	a$1,858,752	a27.5
Expenses and taxes of co.	198,122	63,820	134,302	210.4
Bal. before int. of company	$4,704,895	$6,697,949	a$1,993,054	a29.8
Company fixed interest, &c.:				
Fixed interest debentures	$3,098,914	$3,487,068	a$388,153	a11.1
Sinking fund income debs.	146,709	72,767	73,942	101.6
Interest-bearing scrip, &c	26,640	42,991	a16,350	a38.0
Amort. of debt disc. & exp.	316,376	......	316,376	....
Total	c$3,588,640	c$3,602,826	a$14,186	a.4
Balance	$1,116,255	$3,095,123	a$1,978,868	a63.9

a Decrease. **b** Exclusive of that portion of such charges ranking after fixed interest of Associated Gas & Electric Co. for 12 mos. ended 9/30/36. **c** Includes no interest on income obligations convertible into stock at company's option or charges ranking therewith.

Notes: (1) The foregoing statement shows the actual results of operations for both periods. Subsidiaries acquired during the two-year period are included only from dates of such acquisition. (2) Non-recurring expenses in connection with the plan of rearrangement of debt, capitalization, investigations, legal cases, &c., amounting to $839,045 for the 12 months ended Sept. 30, 1937, and $2,692,725 for the 12 months ended Sept. 30, 1936, are not included above. Since Jan. 1, 1937, however, only the non-recurring expense applicable to the recapitalization plan has been excluded. (3) No provision is made for Federal surtax on undistributed profits, if any, for the year 1937.

ance sheet but is covered by a footnote. The following statement illustrates current practice.

General Water, Gas, and Electric Company

Consolidated Balance Sheet, October 31

Assets—	1937 $	1936 $
a Fixed capital . .	20,229,811	23,561,037
Miscl. investments .	367,391	34,391
Reacquired secur. — par value	145,000	457,000
Special deposits . .	578,717	497,711
Invests. in States Electric & Gas Corp.	1,428,782	......
Cash in banks and on hand	493,366	744,732
Marketable securities at book value . .	613,467	306,052
Accts. & notes rec., less reserve . . .	342,537	468,943
Unbilled rev.—est. .	108,391	118,011
Divs. & accr. int. receivable	17,992	......
Inventories	110,720	177,565
Accts. receivable—non-current . . .	......	2,788
Prepaid expenses . .	31,573	32,827
Deferred charges . .	1,160,060	979,545
Total	25,627,810	27,380,602

Liabilities—	1937 $	1936 $
Funded debt	15,962,600	16,645,900
Notes payable . . .	260,000	400,000
Accounts payable . .	68,165	111,672
Accr. int. & taxes .	298,577	312,925
Prov. for Fed. inc. tax (est.)	71,830	93,334
Accrued divs. on pref. stk. of subs.	1,691	11,941
Accrued divs. on $3 pref. stock	18,793	19,036
Subs. funded debt matured or called for redemption . .	4,733	6,733
Other current liab. .	80,382	81,057
Consumer's & oth. deposits	86,666	115,058
Res. for rate reduction in litig. . . .	510,000	390,000
Res. for conting., &c	198,066	252,857
Pref. stocks of subs. publicly held . .	290,000	1,314,950
Minority interest in common stock & surplus of subs. .	36,344	12,340
b $3 cum. pref. stk.	3,814,400	3,818,605
Com. stk. (par $1) .	217,622	217,615
Paid in and capital surplus	3,344,989	3,028,745
Earned surplus . .	404,167	547,834
c Pref. stk. in treas.	*Dr*41,218	
Total	25,627,810	27,380,602

a After reserve for depreciation of $3,682,708 in 1937 and after reserve for depreciation and depletion of $4,696,799 in 1936. b Represented by 76,288 no par shares in 1937 and 76,372 no par shares in 1936. c Represented by 1,114 shares of $3 preferred stock, at cost.

Modification of Consolidated Income Statements.—This method of compiling statements is, as has been previously noted, open to some criticisms. Although for many purposes this type of statement is satisfactory, for other purposes it is very unsatisfactory. As has been noted in preceding chapters, the holding company structure is not a single legal unit but is a confederation of legal entities. This federated structure permits the sloughing off of a losing unit without dragging down the others. It also makes it possible to obtain legal priorities in claims upon earnings. Thus a holding company, by owning

bonds of a subsidiary, can obtain a claim against earnings which will rank ahead of the dividends on preferred stock of the subsidiary in the hands of the public. The effect of these relationships upon the form of statements can be better seen by discussing the following statement of Cities Service Company.[1]

CITIES SERVICE COMPANY

CONSOLIDATED INCOME ACCOUNT, YEAR ENDED DECEMBER 31, 1932

Gross operating revenue	$168,022,101
Operating expenses, maintenance and taxes	115,890,909
Net operating revenue	$52,131,193
Income from affiliated pipeline companies, dividends on investments in other companies, interest and sundry receipts	5,695,624
Excess of par over book value of bonds and debentures retired through sinking funds; and amortization of discount on bonds held for retirement	3,124,767
Total	$60,951,583
Interest on notes and accts. payable and other charges (less interest capitalized on construction and other accounts $1,254,417)	2,849,475
Interest on funded debt of subsidiary companies	15,056,517
Amortization of debt discount and expense of subsidiary companies	1,990,149
Dividends on preferred stocks of subsidiary companies in hands of public paid and accrued	7,358,260
Balance	$33,697,182
Proportion of net loss of subsidiary companies applicable to min. ints.	689,122
Total	$34,386,304
Interest on funded debt of Cities Service Co.	9,692,924
Amortization of debt discount and expense of Cities Service Co.	702,561
Provision for Federal income tax	157,629
Net income before depletion and depreciation	$23,833,189
Depletion and depreciation as determined by companies	18,367,450
Net income	$5,465,740

The wrong location of depletion and depreciation deductions has been pointed out in another chapter. The important point here is that interest and dividends on subsidiaries' bonds, and preferred stock held by the parent company are eliminated as intercompany items in the consolidated statement. This

[1] *Commercial and Financial Chronicle,* April 22, 1933, p. 2790.

practice understates the strength of holding company securities just as the criticised depreciation and depletion practice overstates it.

The cause of the understatement is as follows: The holding company is dependent on the subsidiaries for its income. The ordinary method of determining the effect of declining gross of the subsidiary is to deduct the decrease from net earnings and then see if there is ample coverage of charges. For example, some investment houses have a rule that they will not purchase a bond whose interest plus prior charges will not be covered when net earnings are reduced by an amount equal to 10% of gross revenues. Others use a 20% standard. The following statements illustrate the practice.

	Before test	After test (20%)
Gross revenue	$1,000,000	$800,000
Operating expenses, taxes and depreciation	600,000	600,000
Net earnings	$400,000	$200,000
Interest of subsidiaries	155,000	155,000
Preferred of subsidiaries	100,000	100,000
Balance for H Co.	$145,000	*Def.* $55,000
Co. H expense	10,000	10,000
Co. H interest	10,000	10,000
Net income Co. H	$125,000	*Def.* $75,000

Under the Cities Service form of statement, it appears that the company could not stand a reduction of net equal to 20% of gross. Yet it is entirely possible that the bond interest of the holding company would be covered because it might hold subsidiary company bonds providing an interest income sufficient to pay the expenses and interest of the holding company. The interest on these subsidiary company bonds would be a charge ahead of subsidiary preferred dividends. As a matter of fact, Cities Service Company did have substantial holdings of subsidiary company bonds.

Improved Form of Statement.—A better form of statement eliminates all intercompany items except those showing prior claims in the financial structure. For example, assume that in the previous illustration Company H owned bonds of

the subsidiaries with interest charges amounting to $25,000. Under this assumption, the foregoing consolidated statement would be quite misleading as to the ability of the parent company to meet its bond interest and other expenses. By showing the income accruing to the parent company without eliminating the $25,000 interest on intercompany bonds, the consolidated statement can be made to give a much truer picture of the financial condition of the holding company.

	Average Earnings	Earnings after 20% Test*
Gross revenue	$1,000,000	$800,000
Operating expenses, taxes, etc.	600,000	600,000
Net earnings	400,000	200,000
Bond interest of subsidiaries	180,000	180,000
Preferred dividends of subsidiaries	100,000	100,000
Balance to Company H	120,000	*Def.* 80,000
Add: Interest to H from bonds of subsidiaries	25,000	25,000
Total income of Company H	145,000	*Def.* 55,000
Expenses of Company H	10,000	10,000
Interest of Company H	10,000	10,000
Net income of Company H	125,000	*Def.* 75,000

It takes but a glance at the above statement to see that even though there is no balance for the subsidiary common stock the bond interest of the subsidiaries is safe. Since Company H owns subsidiary bonds with interest charges of $25,000, it can always obtain sufficient income to pay its own expenses and bond interest.

The type of statement mentioned is of considerable value to creditors and owners of the holding company, but it is not sufficiently used. The following statement of the American Gas and Electric Company, as shown on page 378, illustrates the approved practice.

Balance Sheet Weaknesses.—The consolidated balance sheet is also misleading. Since the assets are owned by a number of subsidiaries, the relationship of debts to assets is entirely concealed by the fact that one subsidiary may have a small amount of debts and a large amount of assets when another subsidiary has a large amount of debts and a small

amount of assets. In a consolidated balance sheet these disproportions tend to offset each other and hide the real facts. This is not usually a serious defect because the creditors of the individual subsidiaries examine the individual statements of the subsidiaries. However, the current position of the system is sometimes badly distorted. Thus a system may show a comfortable cash position when, in fact, the cash belongs to

AMERICAN GAS & ELECTRIC CO.

Period End. Oct. 31	*—1937—12 Mos.*	*—1936*
Sub. Cos. Consolidated		
Operating revenue	$74,024,306	$69,433,499
Operating	22,908,744	21,632,348
Maintenance	4,197,631	3,919,370
Depreciation	9,786,655	9,074,464
Taxes	10,189,962	9,357,903
Operating income	$26,941,312	$25,449,412
Other income	229,462	475,870
Total income	$27,170,774	$25,925,283
Int. and other deductions	10,857,725	11,245,186
Pref. stock dividends	5,014,397	5,014,391
Balance	$11,298,650	$ 9,665,704
Amer. Gas & Elec. Co.		
Bal. of sub. cos.' earns.	$11,298,650	$ 9,665,704
Int. from sub. cos.	3,092,207	3,370,210
Pref. stock divs. from sub. companies	1,910,050	1,910,050
Other income	181,164	222,985
Total income	$16,482,073	$15,168,950
Expense	829,863	638,955
Int. and other deductions	2,134,242	2,562,801
Pref. stk. divs. to public	2,133,738	2,133,738
Balance	$11,384,228	$ 9,833,455

one subsidiary and cannot be used by the control company or by other subsidiaries. The Studebaker Corporation failed when its subsidiary, White Motor Company, had a very comfortable cash position. In 1935, the bondholders of Baldwin Locomotive Works were entirely misled by a consolidated balance sheet of the firm and its subsidiaries. The consolidated statement issued to the stockholders, together with the statement filed with the bankruptcy petition, follows.

BALDWIN LOCOMOTIVE WORKS

CONSOLIDATED BALANCE SHEET DECEMBER 31

(Report to Stockholders)

	1934	1933
ASSETS:		
Property, plant, and equipment	$47,367,193	$50,406,186
First mtge. bond sinking fund	7,626,430	7,302,675
Gen. Steel Castings Corp. stock	2,000,000	5,002,950
Common stock in treasury	1,150,000	1,150,000
Preferred stock of company	139,002	139,002
Bond sinking fund	191	3,400
Other investments	406,473	416,569
Notes and other non-current credit instruments and accounts receivable	100,477	616,154
Cash in banks and on hand	3,451,412	7,649,177
Sundry securities	231,329	233,531
Notes and other credit instruments receivable (current)	2,239,962	1,852,748
Inventories	6,780,076	4,975,794
Deferred charges	246,539	289,667
Total	$71,739,084	$80,037,853
LIABILITIES:		
First mtge. 5% bonds	$10,000,000	$10,000,000
5-year, 6% bonds	10,473,600	10,944,400
Notes and accounts payable	1,473,600	718,163
Interest due Nov. 1, 1934 on 1st mtge. bonds in sinking fund	157,150	....
Accrued accounts	720,426	495,048
Advances receivable on sales contracts	208,696	....
General reserves	3,865,985	....
Reserve for contingency, bad debts, misc. res., and deferred credits	269,230	554,740
Equity of minority stockholders in capital stock and surplus of		
Midvale Company	4,495,539	5,902,862
Whitcomb Locomotive Co.	34,281	37,906
7% preferred stock	20,000,000	20,000,000
Surplus	9,087,088	9,250,732
Total	$71,739,084	$80,037,883

The board of directors of Baldwin Locomotive Works authorized the filing of a petition in bankruptcy shortly after they issued the consolidated statement to stockholders. The petition stated that the company would be unable to meet the interest on its 5-year, 6% bonds due March 1, 1935. In con-

STATEMENT OF ASSETS AND LIABILITIES
AS OF JANUARY 31, 1935

(Baldwin Locomotive Works only. As filed with the reorganization petition)

ASSETS—Plant and Equipment:	$28,995,791
Investments (subsidiaries)	18,046,869
First Mortgage bond sinking fund	7,626,430
Consolidated 6% sinking fund	1,191
Cash	691,919
Receivables (net)	1,144,106
Sundry securities	4,754
Inventories	2,319,401
Receivables (not current)	25,464
Loan to Whitcomb Locomotive	65,000
Deferred charges	169,019
Total	$59,089,945
LIABILITIES:	
First 5s, 1940	10,000,000
Consolidated 6s, 1938	10,438,600
Notes payable	26,185
Accounts payable	939,517
Accrued interest	532,997
Accrued taxes	79,582
Accrued payroll, commissions, etc.	118,420
Advances on contracts	6,080
Total	$22,141,382

nection with this petition the company issued a statement which was reported as follows:[2]

George H. Houston, President, stated that at a meeting of the board of directors of the Baldwin Locomotive Works held Monday, February 25, the Treasurer of the company was directed to give notice that the interest due upon the $10,438,600 principal amount of the 5-year, 6% consolidated mortgage bonds will not be paid on the due date March 1, 1935.

Mr. Houston called attention to the fact that on November 1, 1934, a sum of $157,150 was due as interest on the first mortgage bonds held in the sinking fund and that this sum was not paid because in the judgment of the board of directors, the cash resources of the company were required for current operations. . . .

He stated further that the board of directors decided at its meet-

[2] *Commercial and Financial Chronicle,* March 2, 1935, p. 1474.

ing that the company would not pay the interest due on March 1, in the sum of $313,158 upon the consolidated mortgage bonds without endangering the ability of the company to continue current operations.

It is to be noted that although the consolidated statement showed cash of $3,451,412, the holding company had only $691,919 cash. Both bond issues were the holding company's own. This fact explains why the bond interest was defaulted on March 1.

Miscellaneous Weaknesses.—Still other weaknesses are to be found in consolidated statements but space does not permit a detailed discussion of them here. However, some of these weaknesses are as follows:

1. Consolidated statements do not always indicate which companies have been included in the statements. Exclusion of weak subsidiaries results in a misleading display of strength. Exclusion of strong subsidiaries gives a false display of weakness.
2. If the subsidiaries are engaged in different lines of business the consolidation of plant accounts, of equipment accounts, of inventory accounts, and of various other accounts may result in almost meaningless totals.
3. Differences in methods of valuing assets may largely destroy the usefulness of combined figures for similar types of subsidiaries.
4. The combination of figures of foreign with figures of domestic subsidiaries also raises problems of interpretation.

Conclusion.—Despite the patent unreliability of consolidated statements they serve a useful purpose. Whether or not consolidated statements render a true service depends largely upon the use to which they are put. Such statements are of little use in the internal management of companies. The managers have at their command and use detailed reports from the individual companies. Bondholders and other creditors benefit very little from consolidated statements unless such statements are accompanied by individual statements of the companies

against which they hold claims. Stockholders of the parent company probably receive the greatest service from consolidated statements but, as has been pointed out, the stockholders cannot always rely upon them.

The Securities and Exchange Commission has ample power to correct abuse in this and other types of statements. Eventually the commission will unquestionably better the existing practice. Section 13 of the Securities Exchange Act of 1934 empowered the commission as follows:

PERIODICAL AND OTHER REPORTS

SEC. 13. (a) Every issuer of a security registered on a national securities exchange shall file the information, documents, and reports below specified with the exchange (and shall file with the Commission such duplicate originals thereof as the Commission may require), in accordance with such rules and regulations as the Commission may prescribe as necessary or appropriate for the proper protection of investors and to insure fair dealing in the security—

(1) Such information and documents as the Commission may require to keep reasonably current the information and documents filed pursuant to section 12.

(2) Such annual reports, certified if required by the rules and regulations of the Commission by independent public accountants, and such quarterly reports, as the Commission may prescribe.

(b) The Commission may prescribe, in regard to reports made pursuant to this title, the form or forms in which the required information shall be set forth, the items or details to be shown in the balance sheet and the earning statement, and the methods to be followed in the preparation of reports, in the appraisal or valuation of assets and liabilities, in the determination of depreciation and depletion, in the differentiation of recurring and nonrecurring income, in the differentiation of investment and operating income, and in the preparation, where the Commission deems it necessary or desirable, of separate and/or consolidated balance sheets or income accounts of any person directly or indirectly controlling or controlled by the issuer, or any person under direct or indirect common control with the issuer; but in the case of the reports of any person whose methods of accounting are prescribed under the provisions of any law of the United States, or any rule or regulation thereunder, the rules and regulations of the Commission with respect to reports shall not be

inconsistent with the requirements imposed by such law or rule or regulation in respect of the same subject matter, and, in the case of carriers subject to the provisions of section 20 of the Interstate Commerce Act, as amended, or carriers required pursuant to any other Act of Congress to make reports of the same general character as those required under such section 20, shall permit such carriers to file with the Commission and the exchange duplicate copies of the reports and other documents filed with the Interstate Commerce Commission, or with the governmental authority administering such other Act of Congress, in lieu of the reports, information and documents required under this section and section 12 in respect of the same subject matter.

(c) If in the judgment of the Commission any report required under subsection (a) is inapplicable to any specified class or classes of issuers, the Commission shall require in lieu thereof of the submission of such reports of comparable character as it may deem applicable to such class or classes of issuers.

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CHAPTER 23

HOLDING COMPANY FINANCIAL PLANS

In proceeding to the discussion of final financial plans, it is well to repeat what has been emphasized throughout this book: The basic relationships of any financial institution are with the public. Its earnings must come from the public. They are paid back to the public in the form of interest and dividends. No intermediate bookkeeping will change this fundamental overall relationship. Hence, the aggregate burden of debt and charges, whether they be in the financial structures of operating companies or in those of holding companies, must be in sound proportion to the assets and earning power of the combined enterprises.

Compartment Aspects.—The holding company structure differs from that of simple companies in that each subsidiary is a risk-tight compartment analogous to the water-tight compartments of a ship. If things get too serious, a subsidiary can be cut off from the system and permitted to fail by itself. That is, it is not necessary to send good money of the parent company after bad if it is clear that the subsidiary cannot be salvaged. This means that, actually, a holding company's interest and dividend charges may be considerably safer than the consolidated statement indicates. This fact follows because in the usual consolidated statement, the losses of one subsidiary are deducted from the gains of the others. Thus, if these losses were cut off by eliminating the weak subsidiary, the combined earnings of the remaining subsidiaries would show an increase to the extent by which the losses of the discontinued subsidiary had formerly diminished them. To illustrate, take the following case in which one subsidiary is losing while eight subsidiaries are making a profit:

	Before Elimination of Weak Subsidiary	After Elimination of Weak Subsidiary
Net earnings of 8 subsidiaries . . .	$10,000,000	$10,000,000
Net loss of 1 subsidiary	1,500,000	....
Consolidated net earnings	$8,500,000	$10,000,000

Incidentally this illustration also indicates a common way of juggling consolidated statements. When a subsidiary begins to lose heavily, the parent company frequently treats the securities owned in the subsidiary as an outside investment. In this way, it avoids having to take the annual losses of the subsidiary into the consolidated income statement. This manœuver may give a better earnings picture despite the fact that money which will ultimately be lost is still being poured into the subsidiary. Hence if the losses are to be temporary, the usual method of consolidating earnings should be followed—otherwise not. The stockholder is interested in the ability of the holding company to pull a subsidiary through a temporary period of adversity. Such ability is essential to the preservation of the holding company's equity in the underlying company. In times when the securities markets are closed, when bank borrowing is limited, and when cash is low—the holding company's ability to carry the subsidiary through is based on the combined earnings with the losses included.

Maximum Debt Limits.—Bearing in mind what has been said previously, let us apply the principles to a case. Assume that three electric power and light companies are to be welded into a holding company system. These companies have the following average income statements:

	Company A	Company B	Company C	Combined
Gross revenues	$20,000,000	$10,000,000	$12,000,000	$42,000,000
Operating expenses, etc. .	12,000,000	5,000,000	9,000,000	26,000,000
Net earnings	8,000,000	5,000,000	3,000,000	16,000,000
Interest	2,500,000	2,500,000	500,000	5,500,000
Net income	5,500,000	2,500,000	2,500,000	10,500,000
Preferred dividend . . .	1,000,000	1,000,000		2,000,000
Bal. to common	$4,500,000	$1,500,000	$2,500,000	$8,500,000

Case I. Assume that Company H, a pure holding company, is to own 100% of the common stock of each of the

companies. What amount of interest charges can Company H safely incur?

The standards previously discussed are as follows:

1. Bond interest should be earned on a combined charge basis at least twice on the average.
2. Net earnings should still cover bond interest after deduction of an amount equivalent to 20% of gross revenues.
3. All bond interest and preferred dividends of subsidiaries, payable to the public are charges senior to the bond interest of the holding company.

Applying these standards to the figures given above, we get the following maxima for combined charges.

	Company A	Company B	Company C	Combined
½ net earnings	$4,000,000	$2,500,000	$3,500,000	
Net earnings less 20% of gross	4,000,000	3,000,000	600,000	
Effective standard	$4,000,000	$2,500,000	$600,000	$7,100,000
Present interest	2,500,000	2,500,000	500,000	5,500,000
Present preferred dividends	1,000,000	1,000,000	none	2,000,000
Balance available for Co. H interest, taxes, and expenses	$500,000	none	$100,000	

From the foregoing analysis, it is clear that Company H could safely incur expenses and interest charges to the extent of $600,000 annually. Yet had we used the consolidated income statement, as shown by the combined column, seemingly, Company H could not have incurred any interest charges. The difference in result arises from the fact that each subsidiary is a separate legal entity as well as a part of the system. Even assuming a shrinkage of net earnings equivalent to 50% of net earnings or 20% of gross revenues, Company A would still have $500,000 available to pay to Company H in dividends. Company C would still have $100,000. The mere fact that Company B might have to pass its preferred dividends would not interfere with Company H's income from the other two companies. Incidentally this illustration empha-

sizes the unsatisfactoriness of consolidated income statements as now prepared by accountants.

CASE II. Now let us assume that Company H owns $10,000,000 of Company B 5% bonds, carrying a total interest charge of $500,000. Since Company H, by ownership of the bonds, would have a claim prior to the dividends on Company B preferred stock, it could capitalize this income by issuing its own bonds just as safely as could Company B. Company H earnings available for interest would then be:

From Company A dividends on common	$500,000
From Company C dividends on common	100,000
From Company B interest on bonds	500,000
Total available for bond interest, expenses, and taxes	$1,100,000

CASE III. Assume that Company H also owns $6,000,000 of Company A 6% preferred stock. Since Company A net earnings, with the assumed maximum shrinkage, cover the preferred dividends with a margin to spare (the preferred dividends have already been considered as charges prior to Company H bond interest), this income of $360,000 can be considered available for Company H bond interest. The schedule of dependable income would then be:

From Company A dividends on common	$500,000
From Company A dividends on preferred	360,000
From Company C dividends on common	100,000
From Company B interest on bonds	500,000
Total available for bond interest, expenses, and taxes	$1,460,000

Although, as suggested, ordinary consolidated statements are inadequate to show these relationships, the holding company executives have this detailed information at their disposal.

There is one angle of possible strength to the holding company that has been slighted. This is the ability of the holding company to borrow from its subsidiaries. In the above cases, had Company H been really pressed for funds with which to meet bond interest, by virtue of its control, it could have passed the dividends on Company A preferred stock. It could then have caused Company A to lend the funds thus left

in its treasury to Company H provided the transaction did not come under Section 12 of the Public Utilities Act of 1935. In this way Company H could have obtained possession of $1,000,000 rather than of only $360,000 to which it was entitled as dividends. This method is not ethical, nor if complete details are proved, legal. Nevertheless, it is common. The preferred stockholders of Company A could defeat such a procedure only at the cost of expensive litigation. In some cases, the holding company has caused a subsidiary to issue mortgage bonds and then lend the proceeds to tide the holding company over. However, these methods should not be relied upon in building the holding company financial structure.

A further point that might bear emphasis in this connection is that the earnings on which senior securities are based should include only those to which the companies are unquestionably entitled. That is, if the public utility is earning a higher rate of return than is legally permissible, the excess above a fair return should be eliminated in figuring the amount available for bond interest. The final structure should contemplate only the dependable future earnings.

Purchasing Control with Debentures.—In the boom phase of a business cycle it is not uncommon for promoters to put together holding company systems by issuing debentures or collateral trust bonds in payment for the stocks of subsidiaries. This practice is aptly illustrated by the following announcement concerning the transfer of control of the American Light and Traction Co. to the United Light and Power Co.:[1]

> The entire holdings of the Koppers interests in preferred and common stocks of the American Light and Traction Company are transferred to the United American Company, a newly organized subsidiary of the United Light and Power Company system, in return for $26,872,970 of United American 20-year, 5% debentures and 150,000 shares of class A common stock of the United Light and Power Company.

It is obvious from what has been said that this device can be successfully employed only if there is unused bonding power

[1] *New York Times*, September 27, 1928, p. 42.

somewhere in the structure. Unless earnings which could support bonds are unused, the bonds issued to purchase common stock will not be good bonds, and in a period of business adversity may be defaulted. This, incidentally, has been the fate of the giant Middle West Utilities Company issues.

The undesirability of issuing bonds to acquire common stock has been repeatedly recognized by the Interstate Commerce Commission. For example, early in 1929 it approved only $24,784,000 of a proposed issue of $30,000,000 of bonds of the Chesapeake and Ohio Railway announcing that the cost of acquiring the Sandy Valley should be capitalized by the issue of stock rather than bonds.[2]

Maximum Preferred Stock Limits.—We can now follow through the same type of analysis to determine the earnings available for holding company preferred stock. Here we shall use the standard which requires that holding company preferred dividends and prior charges be earned one and one-half times. In other words, two-thirds of the basic net earnings of the operating companies may be used to pay operating company bond interest and preferred dividends and holding company interest and preferred dividends.

CASE I. (See previous statement of Case I) Company H owns 100% of the common stocks of companies A, B, and C. Company H has $600,000 of interest charges and expenses.

	Company A	Company B	Company C	Company H
Net earnings	$8,000,000	$5,000,000	$3,000,000	
⅔ net earnings or amount available for combined charges and preferred dividends	5,333,000	3,333,000	2,000,000	
Subsidiary interest	2,500,000	2,500,000	500,000	
Subsidiary preferred dividends	1,000,000	1,000,000	none	
Balance to Co. H	$1,833,000	none	$1,500,000	$3,333,000
Co. H interest, expenses, and taxes				600,000
Available for Co. H preferred dividends				$2,733,000

[2] *New York Times*, January 24, 1929, p. 35.

It is now apparent that Company H's interest in Company B cannot be financed by the issue of preferred stock any more than it could be financed by the issue of bonds. The income available to Company H to support preferred dividends is obtained in the same way as was the income available to support bond interest, that is, by treating each subsidiary as a separate unit. Here we assumed that there would be frequent fluctuations to the extent of one-third of the net earnings of the individual companies. Since these frequent fluctuations would occur, a regular preferred dividend could be depended on only if preferred dividends and prior charges did not absorb more than two-thirds of the net earnings. Had we assumed that the fluctuations would not have been more than 25% of the average net earnings, we could have incurred total prior charges and preferred dividends to the extent of three-fourths rather than two-thirds of the net earnings.

CASE II. (See previous statement of Case II) Company H owns $10,000,000 of Company B 5% bonds. Since the income from these bonds is to be used to pay an equivalent amount of interest on Company H bonds, the amount of income available for Company H preferred stock is not affected.

CASE III. (See previous statement of Case III) Company H also owns $6,000,000 of Company A 6% preferred stock. Since the income from this stock is to be used to support a like amount of Company H bond interest, it will not affect the amount of preferred stock that Company H can issue.

Of course, to the extent that Company H does not utilize its full borrowing capacity, it can use the available earnings to support preferred stock instead. This observation applies in all of the cases assumed.

Common Stock.—It is clear that what resources cannot be obtained by the sale or exchange of bonds or preferred stock must be obtained on short-term credit or through the sale of common stock. Since the use of short-term credit is limited, the company must rely practically entirely on the sale or ex-

change of common stock. The amount that can be issued has no fixed limits, but if it is to sell at any specified price, the amount of common stock must be kept within a reasonable relationship to the earnings available for it.

Contract, bargain, Mutual Contract

Protective Covenants of Holding Company Bonds.—Holding company debentures have two great weaknesses: (1) the debts of subsidiary companies may be increased after the holding company bonds have been issued, thereby giving the investor a weaker bond than he contemplated; and (2) the securities which constitute the holding company's assets backing the debentures may be pledged with short-term creditors or stolen by the officers so that little remains for the debenture holders.

These weaknesses are met in two ways. The first method is to put a restrictive provision in the holding company bond covenants preventing additional issues of bonds by subsidiaries unless the new subsidiary bonds are pledged under the existing holding company issue. This type of provision is common among industrials. For example, the subsidiary company issues bonds. These bonds are then delivered to the trustee of the holding company bond issue as security for the holding company bond issue. The trustee may then certify additional bonds of the holding company if the deed of trust so provides. The second method is to have the securities owned by the holding company, pledged under the holding company bond issue, and delivered to an independent trustee for safe keeping.

These provisions tend to make the holding company structure inflexible. Subsidiaries cannot be readily released to permit amalgamation of subsidiaries. This inflexibility has been met in some cases by providing for the substitution of collateral behind the holding company bonds. In the older issues it was customary to require government bonds or some other specified high grade security to be deposited with the trustee if a substitution were made. However, in the 1928-1929 bull market issues were put out which contained almost unlimited possibilities for substitution of collateral. Needless to say, the substitution privileges were greatly abused. It is

probably desirable to hamper flexibility somewhat and return to the more conservative type of provision.

Mixed Holding Companies.—What has been said previously refers to a pure holding company. If the holding company is an operating company as well, it can issue securities against its operating earnings and mortgage its operating properties just as could one of its subsidiaries. Thus if we assume that Company H has an operating business with the following average income relationships, it would have additional securities-issuing capacity as indicated.

COMPANY H OPERATING INCOME STATEMENT

Gross revenues	$20,000,000
Operating expenses, etc.	14,000,000
Net earnings	6,000,000
½ net earnings	3,000,000
Net earnings less 20% of gross	2,000,000
Effective limit on interest	$2,000,000
Net earnings	$6,000,000
⅔ net earnings	4,000,000
Less bond interest	2,000,000
Available for preferred dividends	$2,000,000

Therefore, Company H can issue bonds to absorb $2,000,000 in addition to the amount of income available to support interest charges, which it has derived from its holding company functions. Likewise it can issue preferred stock to the point where an additional $2,000,000 is absorbed by preferred dividends.

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CHAPTER 24

FINANCING CONSOLIDATIONS BY LEASE

The lease has been defined as a contract by which possession, but not ownership, of property is transferred in consideration of stated payments. The lease is used to control individual assets, to control entire corporations, and to bring about a closer operating organization of companies under common stock control. It is the last two uses that concern us here.

Extent of Control by Lease.—As a method of controlling corporations the lease is used considerably less frequently than is majority stock ownership. For example, of 628 cases of consolidation of business units and of change in corporate structure in the electric light and power industry, reported for 1927 by the *Electrical World,* only two instances of lease were recorded. Both of these were insignificant. One was that of a municipal plant which was not susceptible to stock control; the other example was that of the Clark County Water, Light & Power Company, a corporation which was not of sufficient consequence to be reported in Poor's *Public Utilities.* Reliable information concerning leases in other public utility industries is not available. However, certain indicators are available. For the electric railway industry, the census reports for 1927 distinguished between lessor and lessee corporations. These reports showed that the mileage of track of lessor corporations was approximately 13½% of the total miles of track of that industry; but the census reports did not show the extent of concomitant stock control. Since the lease is often used to bring companies already controlled into a closer operating organization, it is possible that a very large proportion of the leased investment in the electric railway industry is actually consolidated by stock ownership. This view is further strengthened by available information concerning some of the large city systems;

for example, 16 of the 27 leased companies in the Pittsburgh, Pennsylvania, traction system were consolidated by stock control. Hence, although it is impossible to determine the actual amount of consolidation by lease from the census reports, it is possible to state definitely that less than 13% of the gross capitalization of the electric railway industry is consolidated by means of the lease. Similar lease conditions prevail for the steam power railways, but here leases are more common than they are among the rapidly growing utilities, and they are used primarily to obtain a close operating organization. Thus more than 75% of the applications to the Interstate Commerce Commission, between May 1, 1920, and May 1, 1926, for permission to lease railroads were for permission to lease in conjunction with a common stock control.

The lease is used extensively by the Western Union Telegraph Company which does 75% to 80% of the telegraph business in the United States. However, in practically all cases the lease is an operating device, since the facilities are also controlled by stock ownership.

In the telephone industry, leases of entire corporations are practically non-existent. This condition is also true of the competive industries.

Provisions of Leases.—Leases vary from rather simple to very formidable legal documents. The detailed provisions will be extensive or brief, depending on the length of time for which the properties are demised, the complexity of the properties, and the identity or lack of identity of the financial interests involved. Regardless of detail, however, the lease will ordinarily contain sections covering the following subjects: property demised or assigned, liquidation of current and deferred assets and liabilities, rental, payment of taxes and assessments during the term of the lease, performance of mortgage and contract obligations of the lessor, proper maintenance and operation of the properties, the making and fiancing of property additions and retirements, term of the lease, surrender of the demised premises on termination and the condition in which they shall be surrendered, and the binding

of successors and assigns. Some of these are matters of legal description and procedure which need not detain us. Others are of considerable economic and financial significance, and will, therefore, be discussed in more detail.

Rentals.—Provisions for payment under lease contracts are of two types: fixed rentals and variable rentals. When the fixed rental is used, the leasing company agrees to make a predetermined payment or payments to the lessor. When the variable rental is used, however, the amount the leasing company is obliged to pay fluctuates from period to period in accordance with some contingency, such as the amount of gross or net revenue accruing from the leased property. Both types of rental have disadvantages.

Fixed Rentals.—The advantage of the fixed rental is that the amount payable is a definitely known amount, not subject to change during the term of the contract.

The disadvantages of fixed rentals arise chiefly from long leases. Consolidations of public utilities are ordinarily of a permanent character. Consequently, they are, in most instances, evidenced by long-term contracts—for 99 years or for 999 years. During such long periods the fundamental economic conditions change. A long-term fixed rental lease is, therefore, accompanied by considerable risk. Unforeseen competition may arise; burdensome taxes may be levied. In short, what was once an exceedingly profitable contract may be turned into a very unfortunate contract which saps the profits of the leasing company. For example, a decision of the Interstate Commerce Commission contains the following account of the lease of the Hereford Railway by the Maine Central Railroad:[1]

> The applicant represents that during the past ten years annual revenues have ranged from $88,000 to $118,000, that the expense of maintaining and operating the line under present conditions is not less than $250,000 a year, to which must be added the rental payment of $64,500, and that it cannot continue to bear the heavy losses with-

[1] 991 C.C. 8.

out serious impairment of its credit, and of its ability to furnish adequate service on the other parts of its system.

In cases of this type it becomes desirable to purchase control of the lessor corporation in order to terminate the contract. Thus the decision of the commission in the Hereford case stated:[2]

The applicant proposes to purchase all or the major part of the capital stock of the Hereford Company from the individual owners thereof. . . . The sole purpose of the proposed acquisition is to enable the applicant to abrogate or modify the existing lease under which it is required to operate the property.

Components of Fixed Rentals.—It is common to make fixed rental contracts in terms of paying the lessor's interest, taxes, assessments, cost of maintaining the corporate organization, rent of offices, salaries, government levies, and dividends at a given rate on stock. The following excerpts indicate the general nature of such provisions:

The Lessee agrees to pay to or for account of the Lessor during the continuance of this lease, as rent for the demised premises and as consideration for the assignments and transfers hereby made, payable at the end of each calendar year except as otherwise hereinafter provided, the following amounts:

(a) The amount of all interest accruing for the duration of this lease on the funded indebtedness of the Lessor at the time outstanding; the same to be payable as and when such interest matures.

(b) The amount of depreciation upon rolling stock and equipment and depreciation upon and depletion of any and all other property included in the demised premises, which shall be accrued by the Lessor in its accounts for the duration of this lease and allowed as deduction in computing the Federal income tax liability of the Lessor.

(c) The amount allowed for the duration of this lease as a deduction in computing the Federal income tax liability of the Lessor as amortization of bond discount.

(d) Such amount as may be reasonably required by the Lessor for maintaining and preserving its corporate existence and organization, but only in the event and to the extent that the Lessor shall not have income from other sources adequate for this purpose.

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[2] *Ibid.*

(e) An amount for payment of dividends upon the capital stock of the Lessor at the time outstanding in the hands of the public at the following rates: five dollars per annum on each share of first preferred stock, four dollars per annum on each share of second preferred stock and two dollars per annum on each share of common stock; which shall be paid by the Lessee, for account of the Lessor, directly to or upon the order of the registered stockholders, semi-annually on the first day of ,1933, and upon the first day of each and thereafter; the Lessee hereby waiving all right to participate as a stockholder of the Lessor in any dividend during the term of this lease out of rentals payable hereunder.

Taxes and Assessments

The Lessee agrees to pay all taxes and assessments, becoming due and payable during the term of this lease, lawfully levied, imposed or assessed upon or in respect of the demised premises or income of the Lessor and all other taxes imposed upon or required to be paid by the Lessor; excepting, however, taxes or assessments or portions thereof chargeable to property investment accounts, and taxes and assessments upon or in respect of investments or other property not hereby demised or upon the income of the Lessor therefrom, and other taxes and assessments to the extent that the same shall have been accrued in the accounts of the Lessor for the period prior to the effective date of this lease. Excepting taxes and assessments accrued in the accounts of the Lessor as aforesaid, no apportionment shall be made of taxes and assessments for the calendar or tax year in which this lease shall become effective.

These provisions are designed to prevent disruption of the contract. The lessor provides for the cost of continuing its corporate existence so that it can oversee the performance of lease covenants and retain its franchises. The payment of interest, taxes, and assessments protects the lessee from loss of the property to prior lien holders.

Variable Rentals.—Variable rentals may be contingent on a variety of things; but ordinarily they are based on gross revenue, net earnings, traffic, or output.

They are used where the future earning power of a corporation is surrounded with considerable uncertainty. If there is doubt that the company being leased will earn a rental, the

lessee is unwilling to contract to pay a fixed rental. On the other hand, if the properties promise to prove prosperous, the lessor corporation objects to a fixed rental because it prevents participation in the profits.[3] The fact that the amount of the variable rental usually depends upon the earning power of the property gives rise to difficulties for both the lessee and lessor. From the standpoint of the leasing company variable rentals involve sharing the profits of its efficiency and also incurring the additional expense of accounting separately for the earnings of the leased property. From the standpoint of the lessor corporation, inability to secure proper accounting for rental purposes is a very substantial objection to contingent rentals. Especially is it difficult to insure proper segregation and reporting of revenues if thousands of individual accounts are involved, as in the electric, gas, and telephone utilities. For example, the author once investigated a case where unintentional discrepancies amounting to nearly $100,000 over a period of three years, had crept into the accounting for certain electric light and power properties—these despite audits by both companies! What might have been the limits of such discrepancies had there been willful dishonesty on the part of the leasing company?

Maintenance of the Properties.—Leased property, like all other property, is subject to depreciation and obsolescence. It is desirable, therefore, to enter into covenants providing in detail for the maintenance and inspection of leased assets. Such restrictions add to the burdensomeness of lease contracts and only too often prove inadequate under changing economic and political conditions. Frequently they have prevented use of the lease. The difficulties standing in the way of protecting the lessor's rights have always obstructed the use of the lease in consolidating industrial corporations. In fact, the short duration of patents and the fickle character of competitive good will have militated against its use in all fields except those

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[3] Such is the situation with respect to the properties leased to the Commonwealth Edison Company by Public Service Company of Northern Illinois. The Public Service Company of Northern Illinois did not lease entire corporations to the Edison Company, but the principle is the same.

where the factor of natural monopoly is large; and even here, the lease has had but slight popularity. It is equally difficult to protect the lessor's and lessee's interests. Unforeseen changes in economic conditions may force the lessee corporation to rebuild entire systems in order to operate at a profit. Further, governmental interference may force costly betterments and alterations; e.g., elimination of grade crossings. These changes are especially difficult to foresee and provide for in contracts which run for centuries. Thus there is always the possibility of an element of onus and maladjustment where ownership and possession are separated.

The following excerpts illustrate the brief type of provision in railroad leases. The first two resulted in litigation.

> The Lessee agrees to operate the demised premises and to maintain the same in a proper state of repair, and to bear all cost and expense thereof chargeable to operating expenses or otherwise than to investment accounts.
>
> The Lessee corporation covenants to "return said road and property, both real and personal, at the termination of this lease, in as good condition and repair in all respects as it is now in, natural wear only excepted."
>
> The Lessee assumes no obligation to surrender the demised premises in the same condition as that in which they shall be received by it on the effective date of this lease, or to fully replace property worn out, retired, abandoned or destroyed, but its obligation shall be satisfied by the surrender of the demised premises in a proper state of repair.

Advantages of Lease Method of Consolidation.—The chief advantage of the lease method of consolidation to the lessee interests is that it gives operating control of companies without requiring new financing. No new capital need be raised by the controlling corporation to purchase assets or stock control, as is the case with other methods. However, in many cases this advantage is outweighed by the disadvantages which arise from the separation of possession and ownership. A survey of public utility systems shows that employment of the lease as a means of consolidating corporations is more frequent in those industries which have a slow growth of investment: namely, in

the electric railway, steam railroad, telegraph, and gas industries.[4] The electric light and power and telephone industries, in which investments have grown rapidly, appear to be comparatively free from consolidations by lease. This fact suggests that the problems of financing extensions and of providing for changing economic conditions, when possession and ownership are separated, are of considerable importance in determining the method of consolidation to be used.

Problems Arising on Termination of Leases.—Although lease contracts may be drawn with a view to preventing terminations thereof without the consent of both parties, this ideal may not be attained. There are always possibilities of unforeseen legal technicalities which permit cancellation by a party when it is to its advantage to do so. There is also the possibility that owing to temporary or permanent conditions the leasing company will default. Default may cause the lessee to lose a valuable lease, together with any improvements that it may have made in anticipation of a long period of tenancy. Further, there is the contingency that the leasing company will be placed in a receivership. In this case the

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[4] The gross capitalization of electric railways is actually declining according to census returns. In 1917 the gross capitalization was $5,532,223,818 and in 1923 it had decreased to $5,446,794,547. Many individual companies, however, increased their capitalization. (See *Census of Electrical Industries: 1922—Electric Railways*, p. 11, Table 2.) The slight rate of growth in the telegraph industry may be shown by an examination of two of the leading systems in this field: the combined funded debt and capital stock of Western Union Telegraph Company and subsidiaries totaled $147,210,537 in 1921 and $147,318,430 in 1925, an average annual increase of approximately 14/1000 of 1%. (Poor's *Public Utilities Manual*, 1927, p. 942.) The Mackay Companies reported: "The Companies during the past 20 years have issued no new securities, but all capital expenditures have been provided from reserves and earnings." (*Ibid.*, p. 162.) The manufactured gas industry (the oldest of the group) has shown less rapid growth than either the electric light and power or the telephone industries. From 1914 to 1919, the value of plant and equipment in this industry increased from $1,252,421,584 to $1,485,656,265—slightly more than $200,000,000. (*Census of Electrical Industries: 1922—Electric Light and Power Stations*, p. 12, Table 9.) It must be noted, however, that these figures are not strictly comparable to those preceding because these cover the war period when normal growth was retarded and prices inflated. The electric light and power and telephone industries have shown the greatest growth in this group. The value of plant and equipment in the electric power and light industry increased from $3,711,924,000 in 1919 to $8,084,000,000 in 1927—more than double the 1919 figure. (*Electrical World*, 91: 32.) The plant investment of the Bell System increased during approximately the same period (1919-1926) from $1,215,944,184 to $2,783,023,059—far more than double the 1919 figure. (*Annual Report, American Telephone and Telegraph Company*, 1926, p. 31.)

receiver is empowered to break the lease. If the lease has been in force for a long time, the lessor may have become purely an investment corporation, and may be embarrassed if forced to retake possession of its property. Thus the *New York Times* remarked of the Manhattan Railway Company:[5]

> The present owners of the Manhattan are not the original owners who operated the elevated lines long before the Interborough came into being with the construction of the first subway. The present owners have no facilities for operation and would be greatly embarrassed if forced to take the lines back.

A similar lack of an operating organization forced the sale of stock of the American Telegraph & Cable Company to Western Union Telegraph Company in 1929. The *New York Times* account of the transaction is as follows:[6]

> A plan to effect a complete merger between Western Union and the American Telegraph & Cable Co., which it leased for a fifty-year period in 1882, was announced yesterday. The committee representing the stockholders of the A. T. & C. stated that it has accepted an offer of $27 a share, payable up to and including December 31, 1929.
>
> By reason of the expiration of the lease the holders of A. T. & C. Company shares were awkwardly placed and virtually had to make a deal of some kind before 1932. The cable lines had value to the lessor, but not to an extent indicated under the terms of the old lease. Hence the committee of shareholders negotiated with Western Union, and had a valuation made up by outside engineers. The present agreement is the result.

Dangers of Manipulation and Litigation.—It is always possible for abuse and misunderstanding to creep into intercorporate transactions. Questions of accounting, particularly, are likely to arise when contingent rentals are involved. Litigation of disputed points is both costly and damaging to all parties concerned, and in many cases may take the profit out of the entire lease transaction.

Although abuses may take a variety of forms, there are

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[5] February 13, 1928, p. 1.
[6] December 3, 1929, p. 4.

two outstanding forms of abuse connected with leases. Both arise when lessor and lessee are under common control. Very common is the practice of throwing profits from one concern to another by contracting excessive or insufficient rentals. The other practice involves purchasing control long enough to negotiate a very favorable lease and then feeding the stock of the lessor back to the public. To protect the public against the latter practice, the Interstate Commerce Commission has often authorized an application to lease on condition that the lessee road would not sell, pledge, or otherwise dispose of the stock without the consent of the Commission.

Cost of Maintaining Separate Corporate Entities.—Since the lessor corporation must continue in existence in order to oversee the performance of the lease contract, an otherwise unnecessary corporate entity is retained. The costs of keeping its charter alive—the maintenance of a nominal organization, the payment of franchise taxes, etc.—must come from the revenues yielded by the leased property. These costs, although not large, are necessary, and therefore are a factor promoting consolidation by direct property ownership in place of consolidation by lease.

Use of the Lease to Simplify Operating.—Although the lease is frequently used as a sole means of consolidation, it is probably most often used as a medium for simplifying operations where common control and direction are already present. Thus more than 75% of the applications to the Interstate Commerce Commission, between May 1, 1920, and May 1, 1926, for permission to lease railroads were for permission to lease in conjunction with a common stock control. An application by the Union Pacific Railroad Company to the Interstate Commerce Commission sets forth the following advantages[7] of leasing controlled corporations:

> It is stated by the applicant that the proposed lease will enable it to operate the railroad of the Pan Handle as a part of its system, which will eliminate much of the separate accounting now necessary.

[7] Finance Docket No. 9422.

It is expected that economies in operation will be effected through a better alignment of operating divisions and the reduction of overhead expenses. It should also simplify the work of preparing reports required by Federal and state regulatory bodies.

Formal Character of Operating Leases.—When corporations already under single financial control are leased to one another, the lease becomes a mere operating device. It is obvious that where a common owner both offers and accepts a proposition, the terms can be arranged so as effectively to meet regulative, economic, and tax conditions. The rental may be reduced to a nominal sum (sometimes to a single, small initial payment), and the accounts may be merged with those of the lessee company. If at any time the terms of the lease become unsatisfactory, the common owner is always in a position to agree with himself to change them. Thus when stock control and the lease come to exist side by side, the emphasis is shifted: the real bond of common financial control is the bond of ownership. The lease becomes a mere instrumentality to promote a closer operating organization, easily modified or dispensed with at the whim of a single party—the common owner.

Power to Enter into Leases.—A corporation has practically unrestricted power to take or dispose of individual pieces of property by lease in furtherance of its objects of incorporation; but its power to lease its entire properties to another corporation is limited. Briefly stated, these limits are as follows: A public service company cannot disable itself from performing its public duties by leasing its entire properties to another corporation unless it has the consent of the state. This consent may be found in the constitution, statutes, or charter; but at the present time it is ordinarily obtained from a regulatory commission to which the legislature has delegated the administration of such grants. Other corporations can dispose of their entire assets unless forbidden by statute, charter, or constitution. From the standpoint of the lessee corporation, the taking of the assets of another corporation must be in furtherance of the objects of the lessee corporation. This

restriction applies equally to public service and non-public service corporations.

Rights of Stockholders.—The general (but not universal) common law rule is that the transfer by lease of the total assets of a corporation is such a departure from the purposes of the corporation that it must have the unanimous consent of the stockholders unless the corporation is failing. In the latter case a majority of the stockholders may authorize a lease of the entire assets for a reasonable period as a step in liquidating the corporation. This limitation is based on the principle that every stockholder of a prosperous going concern has a right to insist as a matter of contract that the affairs of the corporation be administered by its own officers as a profit making enterprise.

This general rule has been modified by statute in about half of the states so that a specified majority of the stockholders can now ratify a lease of the entire assets of the corporation. The majority required ranges from a bare majority (of the amount of the outstanding stock), as in Delaware, to a four-fifths majority in Alabama. The most common requirement is that a two-thirds majority must ratify the lease.

When less than unanimous consent is required, provision is usually, although not invariably, made that the corporation shall purchase the shares of dissenting shareholders at some value specified in the statute. The general nature of these provisions has been discussed in a preceding chapter.

Rights of Creditors.—The creditors of the lessee company have no right to interfere with a lease contract unless they have reserved that right in their debt agreement. It is true that their interests may be impaired by an increase in the obligations of the company, but that is a risk they run. However, they can, of course, subject the leasehold interest of the lessee to their claims.

On the other hand, the creditors of the lessor company have definite rights which they can enforce. If the entire property of a corporation is leased to another corporation with notice, the property may be followed into the hands of the lessee and

applied to the satisfaction of the debts on the theory that the property of a corporation constitutes a trust fund for the payment of its obligations.

To avoid misunderstandings and possible legal complications, provision for the debts of the lessor is ordinarily made in the lease. Usually the lessee agrees to pay the debts of the lessor maturing during the period of the lease. Occasionally, however, there is a clause stating specifically that the lessee shall not be liable. If the debts have been assumed, the creditors can sue the lessee directly upon the assumption clause.

Mortgage and Contract Obligations.—Provision is made for the lessee to perform the mortgage covenants and contract obligations of the lessor. The following sample is from a railroad lease:[8]

The Lessee agrees to perform all covenants on the part of the mortgagor contained in any mortgage made by the Lessor or its corporate predecessors to which the demised premises or any part thereof are subject, except covenants to pay the principal of the indebtedness secured by such mortgage or underlying mortgages and except covenants to replace any part of the mortgaged properties. The Lessee assumes and agrees to perform and observe all obligations of the Lessor under any and all leases, trackage contracts, franchises, ordinances, easements, licenses and other contracts demised, assigned and transferred to the Lessee by this lease, or to which the demised premises or any part thereof may be subject; provided that all expenditures by the Lessee in performance of any of the aforesaid obligations which are chargeable to investment accounts shall be charged to and reimbursed by the Lessor, and that any moneys or other considerations received by the Lessee under any of said leases and contracts which are properly creditable to investment accounts shall inure to and become the property of the Lessor. The Lessee shall have the right to secure the extension, modification or abrogation of any lease, trackage contract, franchise, ordinance, easement, license or other contract deemed by it desirable in the interest of the demised premises as a whole or advantageous in the operation thereof.

Rights of the Lessor Company.—The lessor company retains its corporate existence, powers, and other rights not

[8] Interstate Commerce Commission, Finance Docket 9422.

transferred by lease. Most important of the retained rights of the public service corporation is the right of eminent domain. The company cannot transfer this right but usually permits the lessee to bring actions in its, the lessor's, name. The following is a sample provision:[9]

Upon the request of the Lessee, from time to time, the Lessor will, to the extent of its rights and powers, permit to be instituted and prosecuted in its name proceedings in the exercise of the right of eminent domain or otherwise for the acquisition of additional property, rights of way, rights to cross, intersect or connect with other railroads, or rights to cross rivers, canals or other waterways or public highways, which shall be deemed necessary or desirable for the purposes of additions to or betterments or extensions of the demised premises.

Financing Extensions.—

For the purpose of reimbursing the Lessee for the cost of additions to and betterments and extensions of the demised premises chargeable to the Lessor, less credits upon retirements, destruction and sales of property, under the foregoing provisions of this article, the Lessor, from time to time during the term of this lease, will subject to any necessary governmental approval, upon request of the Lessee, make, execute, issue and deliver to the Lessee, in such amounts as may be necessary for the purpose aforesaid bonds, notes or other evidences of indebtedness, as the Lessee shall elect, bearing such rates of interest and payable at such times as the parties hereto shall determine, and, if so requested by the Lessee, secured by mortgage upon the demised premises or any part thereof.[10]

Where continual extensions must be made, the financing of new undertakings is made difficult by the separation of possession and ownership. If extensions are to be financed by issuing securities of the lessor corporation, such extensions are likely to be hampered by disagreements or burdensome covenants. Furthermore, financing by the lessor cannot ordinarily be undertaken so economically as can financing by large direct property owning companies because the issues of lessor companies are often small and lack diversification of

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[9] *Ibid.*
[10] *Ibid.*

underlying economic conditions.[11] For example, if each of five properties require new capital to the extent of $500,000, a single corporate owner could bring out an issue of $2,500,000, but five separate lessor corporations would be forced to bring out single issues of $500,000 each. The weakness of this type of financing is stated clearly in the following excerpt from an application before the Interstate Commerce Commission:[12]

> The simplification of applicant's financing. The necessary capital requirements of the Pacific Company and its subsidiaries in the past have been provided, so far as possible, through the First and Refunding Bonds of the Pacific Company, dated April 1, 1904, maturing April 1, 1934. The capital requirements of the various subsidiaries have been provided by advances from the Pacific Company, for which the subsidiaries, respectively, have delivered to the Pacific Company their bonds at par. The various finance dockets of the Commission involving such bond issues will be referred to at the hearing. The bonds of the subsidiaries are not as a rule readily marketable, so that the Pacific Company has not always been able to recoup itself for these advances on satisfactory terms.

On the other hand, if the lessee corporation is obliged to finance extensions, it is hampered by the fact that it cannot use the extensions as backing for its securities, or trade on the equity of the leased ownership unit. In addition, the fact that extensions pass to the lessor at the termination of the lease often deters all except necessary additions. If the lease is to expire shortly, there will not be time to profit from extensions; and even if the lease is for a long term of years or for perpetuity, there is the risk of losing investments in extensions in case the lease is terminated by default or through legal technicalities.

Control of Subsidiaries of Lessor.—When the lessor has subsidiaries which conduct parts of the business, it is customary

[11] In holding corporation systems this difficulty is sometimes obviated by selling the new securities of lessor corporations to the holding corporation, which then pledges them under its large issues. However, according to testimony introduced in behalf of Public Service Company of New Jersey, leased properties in that system increased the cost of borrowed capital nearly 2%. (See 91 *Electrical World* 827 and *Public Utility Reports* 1924 E).

[12] Finance Docket 9410 of Interstate Commerce Commission.

to provide in the lease that the lessee shall vote the stock of the subsidiaries. In this way the lessee can conduct effectively all parts of the business.

Financial Risk of Rentals.—Rentals like interest are payments for the use of capital. In the one case, however, the capital has been sunk in specific property before it is rented; in the other, liquid funds are borrowed and sunk by the borrower. However, the effect on the financial structure of the lessee will be the same for both types of payments. Each constitutes a contractual obligation which will entail serious consequences if defaulted.

The risk attaching to a rental obligation will, of course, vary with the nature of the rental. If the rental is contingent on net earnings, then the risk is nil, since no payment is required unless net earnings are sufficient to cover it. However, rentals contingent on gross revenues, traffic, output, etc., contain a distinct element of danger because net earnings can be entirely wiped out by only a small reduction in gross revenues. The extent of the danger depends upon the amount of deficits and rental to be absorbed in poor years. The fixed rental, being rigid, is most dangerous of all. It partakes of the invariable character of bond interest and has the same effects on the financial structure of the enterprise. Consolidated net earnings should cover the combined interest and rental payments the same number of times that they should cover the interest requirements of a system having no rentals. For example, if we accept a standard requiring net earnings to cover bond interest of a company twice on the average, then in case there are rentals, we should expect combined bond interest and rentals to be covered twice. If we should hold that combined interest and preferred dividends should not exceed two-thirds of the average net earnings, then for the preferred stock to be good, the combined rentals, interest, and preferred dividends should not exceed that proportion of the net earnings. It is well to dwell on this point because much mistaken analysis is centered around a failure to recognize the fundamental importance of rentals as fixed charges.

Example: A Fixed Rental Lease.—

COMPANY A BEFORE TAKING OVER PROPERTIES OF COMPANY B BY LEASE

	Good Year	Average Year	Poor Year
Gross revenues	$200,000	$175,000	$150,000
Operating expenses, taxes, etc.	100,000	95,000	90,000
Net earnings	100,000	80,000	60,000
Interest	50,000	50,000	50,000
Net income	50,000	30,000	10,000
Preferred dividends	5,000	5,000	5,000
Available for common stock	45,000	25,000	5,000

COMPANY B BEFORE LEASE OF ITS PROPERTIES TO COMPANY A

	Good Year	Average Year	Poor Year
Gross revenues	$100,000	$87,000	$75,000
Operating expenses, taxes, etc.	50,000	47,000	45,000
Net earnings	50,000	40,000	30,000

Company A takes over the properties of Company B under a lease which provides for a fixed rental of $45,000 a year. Combined operations will reduce expenses by $5,000 a year.

COMPANY A AFTER ENTERING INTO THE LEASE

	Good Year	Average Year	Poor Year
Gross revenues	$300,000	$267,000	$225,000
Operating expenses, taxes, etc.	145,000	137,000	130,000
Net earnings	155,000	130,000	95,000
Interest	50,000	50,000	50,000
Rental	45,000	45,000	45,000
Net income	60,000	35,000	none
Preferred dividends	5,000	5,000	none
Available for common stock	55,000	30,000	*Def.* 5,000

In the preceding example, earnings available for common stock are increased by $10,000 in good years and in average years by the leasing of Company B's properties. However, in a poor year earnings available for common stock are completely wiped out and a deficit of $5,000 occurs.

This example, purely arbitrary, shows the dangers that may be encountered when the lessee already has all the bonded indebtedness that it can soundly bear. The large fluctuations

in the income available for common stockholders are the result of trading on the equity.

For Company A's financial structure to be considered conservative combined interest and rentals should not exceed 50% of the average net earnings and combined interest, rentals, and preferred dividends should not exceed 65% of the average net earnings. Actually, combined interest and rental charges take 73% and combined charges and preferred dividends take 77% of average net earnings. In the poor year combined charges take all of the net earnings. Nothing is left for either preferred or common stock.

Example: Variable Rental Lease (Net Earnings).—It is well to emphasize again that from the standpoint of meeting obligations the least dangerous type of rental is that contingent on net earnings. Being contingent on net earnings, such a rental is not payable unless there are net earnings. Neverthe-

COMPANY A BEFORE TAKING OVER PROPERTIES OF COMPANY B BY LEASE

	Average Year	Poor Year
Gross revenue	$200,000	$150,000
Operating expenses, taxes, etc.	150,000	130,000
Net earnings	50,000	20,000
Interest	20,000	20,000
Net income	30,000	none

COMPANY B BEFORE LEASE OF ITS PROPERTIES TO COMPANY A

	Average Year	Poor Year
Gross revenue	$100,000	$75,000
Operating expenses, taxes, etc.	75,000	65,000
Net earnings	25,000	10,000

COMPANY A AFTER ENTERING INTO THE LEASE

	Average Year	Poor Year
Gross revenue	$300,000	$225,000
Operating expenses, taxes, etc.	225,000	195,000
Net earnings	75,000	30,000
Interest	20,000	20,000
Rental (80% of net earnings of B)	20,000	8,000
Net income	35,000	2,000
Profit to A from lease	5,000	2,000

less, even such a lease is not free from burdens in a poor year because operating losses must be absorbed by the lessee company.

Example: A Variable Rental Lease (Net Earnings with Operating Deficit).—

COMPANY A BEFORE TAKING OVER PROPERTIES OF COMPANY B BY LEASE

	Average Year	Poor Year
Gross revenue	$200,000	$150,000
Operating expenses, taxes, etc.	150,000	130,000
Net earnings	50,000	20,000
Interest	20,000	20,000
Net income	30,000	none

COMPANY B BEFORE LEASE OF ITS PROPERTIES TO COMPANY A

	Average Year	Poor Year
Gross revenue	$100,000	$55,000
Operating expenses, taxes, etc.	75,000	65,000
Net earnings	25,000	*Def.* 10,000

COMPANY A AFTER ENTERING INTO THE LEASE

	Average Year	Poor Year
Gross revenue	$300,000	$205,000
Operating expenses, taxes, etc.	225,000	195,000
Net earnings	75,000	10,000
Interest	20,000	20,000
Rental (80% of net earnings)	20,000	none
Net income	35,000	*Def.* 10,000

In this case it is clear that even a rental contingent on net earnings is not free from danger to the lessee company if the leased property produces an operating deficit rather than net earnings. Even though the terms of the lease required the lessor to absorb a portion of the loss, the lessee might find itself obliged to meet the loss in the poor year because the lessor was unable to pay.

Example: A Variable Rental Lease (Gross Revenues).—As we pass from net earnings to other bases, such as traffic, output, or gross revenues, the financial risks increase since the properties may produce much traffic or gross revenue without

producing any net earnings with which to pay the rentals. Thus in the following example the rental contingent on gross revenues threatens the financial structure quite like a fixed rental.

Company A before Taking over Properties of Company B by Lease

	Average Year	Poor Year
Gross revenue	$200,000	$150,000
Operating expenses, taxes, etc.	150,000	130,000
Net earnings	50,000	20,000
Interest	20,000	20,000
Net income	30,000	none

Company B before Lease of its Properties to Company A

	Average Year	Poor Year
Gross revenue	$100,000	$75,000
Operating expenses, taxes, etc.	75,000	65,000
Net earnings	25,000	10,000

Company A after Entering into the Lease

	Average Year	Poor Year
Gross revenue	$300,000	$225,000
Operating expenses, taxes, etc.	225,000	195,000
Net earnings	75,000	30,000
Interest	20,000	20,000
Rental (20% of B's gross)	20,000	15,000
Net income	35,000	*Def.* 5,000
Profit to A from lease	5,000	*Loss* 5,000

The fact that the rental based on gross revenue creates a charge in excess of net earnings in the poor year impairs Company A's credit.

Effect of Leases on Capitalization.—Because of the essential likeness of fixed rental payments to bond interest, it has long been customary to treat the lease obligation like bonded debt of the lessee. Rentals are capitalized (usually at 5% for railroads) to obtain the approximate equivalent debt burden of the lease. For example, if Company A has bonds of $50,000,000 and stock of $50,000,000 and is obligated to pay fixed rentals of $1,000,000 annually, then at a 5% capitalization rate the $1,000,000 rental would be considered to increase its

debt structure by $20,000,000, giving a total capitalization of $120,000,000 rather than the stock and bond capitalization of $100,000,000. By thus capitalizing rentals, it is possible to compare lease systems more intelligently with non-lease systems and to gauge more accurately the top-heaviness of debt structures. In the case mentioned, the structure would be considered as:

Debt	$70,000,000
Stock	50,000,000

Summary.—The lease appears to be much less used than is stock control as a means of consolidating entire corporations. This non-use appears to be due to the fact that the lease is not so flexible a device for consolidation as is ownership—either ownership of the property or ownership of the controlling stock. The lease interposes difficulties to ready, economical financing of extensions in a growing industry. It does not always adequately meet changing economic conditions—rentals and covenants are unwieldy, fixed things. The lease is not an unbreakable contract; but, on the contrary, it is subject to technical defects, to default, and to abrogation through receivership. Further, the necessity for supervising leases entails the maintenance of an otherwise unnecessary corporation—subject to expenses and taxes. These are the objections that are commonly voiced with reference to leasing corporations. No one of them may be of sufficient importance to prevent employment of the lease, but collectively they seem to be of sufficient weight to have caused a considerable avoidance of the lease as a means of consolidation.

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CHAPTER 25

INCOME AND RESERVES

Income Statement.—Chapter 1 set out a detailed income statement. This statement was a condensed summary of the changes that had taken place in the financial condition of the business during the past year. More correctly it was a statement of the changes that had taken place in the accounts of the business; only to the extent that these correctly described the condition of the business, was the statement a reflection of the condition of the business. The reader should always bear this distinction in mind. The accountant and statistician are trying to describe economic facts with figures. Complex economic situations are reduced to a money basis which is supposed to describe them accurately. Even with the entire resources of the language available, accurate description is a difficult task; but with only figures as a tool, description not infrequently misses its mark. It is for this reason that all financial statements must be taken with a degree of skepticism. An assumption that $10,000,000 worth of machinery will last 20 years when it will become obsolete in five will make $1,500,000 difference in the annual net income shown by the income statement and will make corresponding differences in the indicated value of assets in the balance sheet. The invention of new machinery and the development of substitute products seriously affect values on a large scale. These changes are very hard to visualize and, hence, very hard to describe. Yet the directors of the business and the investment analyst must be ever alert to sense them and prepare for them.

For the most part, income statements are the dead product of a dead past. They look backward and are an imperfect description of what has been; whereas business interest lies in tomorrow and the long-term future. Security purchasers are buying the future. No amount of past history will give

value to a security with a barren future. Yet business moves with the experience of yesterday and predicts the morrow from the known habits of the past. Human nature and human habits change slowly. Facilities and resources carry over. The income statement then, even though a record of the past, is important as a foundation from which to predict the future. It is the logical starting point for manager or investor in gauging the prospects and policy of a coming year.

Supporting Schedules.—These forms are much too condensed for accurate policy determination or for accurate investment analysis. As was pointed out in the discussions of capitalization, the important income figure in determining financial structures is the net earnings after all expenses but before fixed charges. This figure shows what, from an operating standpoint, the management is able to accomplish with the assets. The subsequent items in the statement show how the structure divided the earnings among the different classes of security holders. The former figure is controlled by economic conditions; the succeeding figures are the artificial product of the securities structure set up by the promoters.

Although the net earnings figure is the starting point for financial structure analysis, it is but the final result of a large number of gross income items and deductions that preceded it. Those preceding items are very important in the determination of policy. The management will have at its disposal supporting schedules showing summary details of the individual totals. From these supplementary schedules and reports the management can gauge the trend of business, the trend of prices, the normality of sales returns and allowances, the level of operating, selling, and administrative expenses, the trend of taxes, the rate of interest paid on borrowed funds, and a host of other conditions and prospects much better than can the outsider. The investment analyst must ordinarily estimate these factors for himself. His success will depend largely on the extent of his familiarity with conditions in the industry and the degree to which external conditions throw light on internal affairs of particular companies.

Detail of Statements.—In spite of the fact that management has ample budgetary and special reports on which to ground its policy, it should publish reasonably detailed statements for its stockholders. They are vitally interested in the prospects of their holdings. They are entitled to know what portions of income are recurring and what are not. Sound finance would require that non-recurring items be segregated from recurring items in the statement. Since the scale of maintenance affects the rate of depreciation of property, maintenance costs should be shown separately from operating costs. Depreciation and depletion should be separately stated. These items are at best estimates; hence, the stockholder should have the right to recheck management determinations of these accounts. In this connection balance sheets should show a more detailed classification of depreciable property. Non-operating income should be separately stated in the income statement, and the investment in non-operating assets should be segregated on the balance sheet. Only with such detail can the stockholder judge the effectiveness of outside ventures.

Management of Income.—Management of income involves the study of the distribution of income as well as its sources and probable trend. Such studies focus on expense ratios, on the cost of borrowed capital, and on the reserves which must be set up in order that business facts may be correctly reflected by the accounts and that excessive amounts of income may not be paid out in dividends.

Operating Ratio.—The operating ratio is the ratio of total operating expenses to gross revenues.

For the public utility and railroad:

$$\frac{\text{Operating Expenses}}{\text{Gross Revenues}}$$

For the merchandising and manufacturing concern:

$$\frac{\text{Operating Expenses} + \text{Cost of Goods Sold}}{\text{Gross Operating Income}}$$

This ratio shows the number of cents out of every dollar taken in, that goes to expenses. The remainder of the dollar is available for interest and dividends.

The operating ratio was developed in railroad and public utility analysis. Where rates for service remained constant, the ratio was assumed to show the efficiency with which management was controlling costs. As an indicator of the trend of affairs the ratio serves a useful purpose, but like any general average it is not a suitable tool for careful analysis. The overall ratio has given place to the 100% breakdown-of-gross-revenue distribution in which each item of expense is shown as a percentage of gross revenue. In this way it is possible to see, for example, whether transportation expense or maintenance is responsible for the change in the operating ratio.

The operating ratio is not generally used among merchandising and manufacturing concerns. Instead, the *margin of profit* is the usual overall comparative ratio. The margin of profit ratio represents the difference between the operating ratio and 100%—the ratio of the margin left over after expenses to gross income.

The operating ratio and margin of profit ratio are at best rough tools of analysis. They are affected by changes in gross as well as by changes in expenses. Thus a 10% reduction in public utility rates will come out of the margin left after expenses and thereby raise the operating ratio, even though expenses remain the same. Hence, like any ratio the operating ratio has little significance apart from the background against which it is interpreted.

Cost of Borrowed Capital.—The phrase, cost of borrowed capital, covers all costs incidental to the use of not-owned capital in the business. Among these costs are interest paid, discount amortized, underwriting costs, cash discounts not taken, rentals, and royalties.

Bond Discount and Premium.—The contract rate of interest on bonds can be set below the market rate if the bonds are sold below par, or set above the market rate if the bonds

are sold above par. The discount and premium are merely methods of reconciling the contract rate to the market. The true cost of using the funds consists of the contract rate plus the discount or minus the premium allocable to the period. Bankers' commissions should be written off to interest cost over the life of the issue in the same way that discount is. When an issue is sold outright to bankers at a price, the corporation merely enters the price received from the bonds; and—since the bankers' costs and profits come out of the spread between this price and the resale price to the public—the corporation is not concerned with these bankers' costs and profits.

Cash Discounts.—The granting of cash discounts is general practice in the United States. These discounts are usually large; hence no well-financed business will fail to take advantage of them.

In treating cost of purchases, the billed price less the discount should be entered on the books as the cost of the goods. This is the cost a well-financed business will consider in making price comparisons. If the discount cannot be taken because of weak financial position, the extra cost represented by the discount not taken should be treated as a cost of borrowed capital and included in the interest paid group of items in the income statement. Similarly if credit is extended to weak customers who fail to take their discounts, the amount received in discounts not taken by such customers should be treated as financial income.

Rentals and Royalties.—Rentals are payments for the use of tangible property; royalties, for the use of intangibles, e.g., patented processes. As explained elsewhere, the contract rental may be a pure payment for the use of capital, or it may be part payment for the use of capital and part depreciation, maintenance, and/or other charge depending on contractual provisions for maintenance of the leased property. As a general proposition rentals should be separately shown among the fixed charges since they partake more of the nature of interest than of operating expenses.

Classification of Reserves.—Some writers classify reserves as:

1. Valuation
2. Liability
3. Surplus

This classification is brief and serves most purposes of financial thinking.

Valuation reserves are reserves that reflect the shrinkage in value of assets: for example, depreciation, depletion, and bad debts reserves. These reserves are called valuation reserves because to find the indicated net value of the assets they are deducted from the corresponding asset accounts.

Liability reserves are reserves to meet claims against the business, for example, a reserve for federal taxes. The claim is not yet fixed in amount, nor is it fixed as a liability. The amount of the claim will not be known until the final results of the year are tabulated. Because the claim lacks the definiteness of contractual obligations for wages and interest which are not yet due, the tax liability is set up in the form of a reserve. Eventually a definite liability will face the company, but its amount may vary from the reserve figure. To all intents and purposes the reserve figure may be treated as a liability of the business. Reserves for lawsuits and rate-cases which the company is certain to lose should likewise be treated as liabilities. Reserves for damage payments under broken contracts also fall here.

The surplus reserves group includes all those reserves which represent an excess of assets over the sum of the liabilities plus the stated amount of the capital stock. Here are classified the ordinary earned surplus, capital surplus, and sinking fund reserves. Here also will be classified the reserves for extensions, new facilities, improvements, and betterments.

Some reserves do not readily fit this classification. For example, an insurance reserve represents a fund of assets in excess of the sum of the liabilities plus the stated amount of capital stock. If the business were to be sold, the assets would show this excess or surplus. Yet, if the reserve has been set up

on an accurate actuarial basis, it will be required to meet insurable losses at some time in the future. Looked at from the point of view of continued operations, the reserve approximates the federal tax reserve status. Consequently it is usually classified as a liability reserve on the theory that it will actually be used to meet losses. Some of the other reserves pose the same difficulties, notably those dealing with lawsuits, rate-cases, and numerous other situations in which the element of loss is doubtful.

Surplus.—Surplus has been repeatedly defined as the excess of assets over the sum of the liabilities plus the stated value of the capital stock. As such it represents a more or less speculative appraisal of the stockholders' equity in the corporation in excess of the par or stated value of his shares. The surplus does not necessarily represent any particular assets or any particular fund of assets. It is a speculative figure because all assets are assumed to be worth the figures at which they are carried on the books. Seldom does such a coincidence of values exist.

Surplus may arise in many ways. The most obvious way is through earnings retained in the business. Surplus thus arising is called earned surplus. Surplus which does not arise in the usual course of business by the retention of earnings is ordinarily called capital surplus. The sources of capital surplus are numerous. The stockholders may pay more than par or stated value for their shares, a common practice in organizing new banks. The excess is paid in surplus—a capital surplus item. Stockholders or others may make donations of property to the corporation or cancel obligations due from it. Such transactions result in donated surplus. Capital assets may be sold at a price in excess of book value; capital surplus arises. Assets may be put on the books at a reappraisal figure; stock may be forfeited for non-payment of subscriptions; stockholders may be assessed; bonds and stock may be purchased on the market at less than their par value; the par or stated value of outstanding stock may be reduced. In all these cases capital surplus arises.

Surplus as a Buffer.—The surplus account is a buffer account. It absorbs undistributed profits. It takes up the shock of losses. It fluctuates while the capital stock account stays constant. In banking institutions public ignorance is such that a second surplus account, known as an undivided profits account, is set up to cushion the first shocks of changing income. This permits the surplus account to remain relatively constant. Hence, the public does not become apprehensive over changing figures.

A surplus, in the sense of a buffer, is very desirable. The credit of a corporation undoubtedly suffers if its capital stock is impaired. It suffers much more in this case than it would suffer if similar inroads were made on an existing surplus. The loss to the company would be the same in either case; the economic conditions and policies that produced it would be the same; but the public reaction would be different. For so long as the public thinks rigidly in terms of bench marks rather than in terms of economic facts and for so long as statutes cause corporations to operate with reference to bench marks, for that long will a substantial surplus be desirable as a buffer. Despite the ease with which the stated value of stock can be adjusted, credit is still unduly injured by the antecedent impairment of the capital stock account.

Surpluses of Leading Corporations.—On December 17, 1937, the following table showing the comparative surpluses of 43 corporations, railroad, industrial, banking, and public utility was introduced in evidence at hearings of the Senate Interstate Commerce Committee.[1]

Corporation	Dec. 31, 1935	Dec. 31, 1936
Pennsylvania Railroad System	$934,374,916	$906,228,106
Ford Motor Company	582,977,651	602,666,672
Standard Oil Company (New Jersey)	448,127,942	491,093,355
Southern Pacific Lines	474,624,909	480,977,485
Atchison, Topeka & Santa Fe Railroad Company	387,348,638	385,705,146
General Motors Corporation	331,680,319	368,081,225
Union Pacific System	359,811,804	358,104,055
American Telephone and Telegraph Company	353,608,395	330,040,795

[1] *New York Times*, December 18, 1937, p. 29.

Corporation	Dec. 31, 1935	Dec. 31, 1936
Metropolitan Life Insurance Company	259,809,721	278,324,668
United States Steel Corporation	252,516,714	252,660,716
E. I. du Pont de Nemours & Co.	196,312,228	226,236,595
Chesapeake & Ohio Railway	204,869,187	209,971,826
Northern Pacific Railway	201,201,023	199,265,242
New York Central Railroad	204,915,953	198,229,557
Chicago, Burlington & Quincy Railroad	193,999,255	189,218,469
Guaranty Trust Company (New York)	170,000,000	170,000,000
Consolidated Edison Company	224,548,923	160,478,350
Great Northern Railway	148,277,050	152,036,511
New York Life Insurance Company	(a) 116,706,872	(a) 123,896,632
Chase National Bank	50,000,000	100,270,000
Cities Service Company	97,602,290	92,533,128
Equitable Life Assurance Society of the United States	54,799,809	78,085,436
Southern Railway Company	73,426,537	75,650,831
Prudential Insurance Company of America	72,334,013	74,646,081
Baltimore & Ohio Railroad	72,975,539	72,771,463
Illinois Central Railroad	68,931,595	66,457,374
Mutual Life Insurance Company of New York	(b) 55,769,831	(b) 61,520,866
United Gas Improvement Company	56,990,015	58,191,830
Bethlehem Steel Corporation	74,487,447	57,562,527
Anaconda Copper Mining Company	48,163,651	50,953,797
Bankers Trust Company (New York)	50,000,000	50,000,000
National City Bank of New York	30,000,000	42,500,000
United Corporation	39,333,262	39,231,150
Erie Railroad	38,159,300	39,115,577
Bank of America National Trust and Savings Association	32,500,000	34,100,000
Manufacturers Trust Company (New York)	6,600,000	33,000,000
Columbia Gas and Electric Corporation	19,024,120	20,384,507
Electric Power and Light Corporation	10,619,387	17,853,508
Continental Illinois National Bank and Trust Company	12,500,000	15,000,000
Chicago & Northwestern Railway	11,691,709	264,148
New York, New Haven & Hartford Railroad	(d) 3,151,439	(d) 9,884,818
Missouri Pacific Railroad	(d) 32,061,782	(d) 41,564,309
Chicago, Milwaukee, St. Paul & Pacific Railroad	(d) 92,694,208	(d) 110,551,370

(a) Designated on balance sheet as "unassigned funds." (b) Designated on balance sheet as "contingency reserves." (d) Denotes deficit.

Importance of the Source of Surplus.—Many writers place great stress on the sources of surplus as a guide to dividend declarations. These discussions seem largely academic. If the corporation has funds which it cannot profitably employ, it should pay them to the stockholders. If it cannot use its entire capital profitably, it should, if necessary, reduce the stated amount of its stock and return the excess funds to

the stockholders. The source of the funds is immaterial. The real question is, can and should the business spare them? Dividends paid out of non-recurring income or capital surplus should be advertised as such so that stockholders will not be misled. But the only reason for examining the source of surplus is to put the managers and stockholders on notice as to the character of the non-recurring distribution.

One thing should be stressed. Surplus is not ordinarily offset by a cash fund. As receipts come into the business, they are utilized for immediate purposes. The surplus may well be offset by new fixed capital items. Consequently, the cash budget usually figures in dividend policies far more prominently than does the detail of the surplus accounts.

Contingency Reserves.—Every business should set up reserves for actual losses suffered or to be suffered, such as reserves for depreciation, depletion, and bad debts. In addition to these valuation reserves, it is customary to set up reserves to meet losses which appear to be reasonably possible. Estimated losses on unfilled contracts owing to material, price, or wage changes would fall in this group. Lawsuit and rate-case reserves in which the result was in doubt would also fall here. Reserves against fluctuations in foreign exchanges are customary among companies engaged in foreign trade. Good management requires that these contingencies be examined and provision made for them. No earnings can be said to be clearly available for dividends until the management has grappled with these problems.

Insurance Reserves.—Some companies carry their own insurance; that is, they set up reserves from which property is replaced rather than pay premiums to insurance companies. Reserves should be carried against uninsurable property as the only way of meeting losses on this type of property. Insurable property presents a different problem. Here protection can be purchased. Can the company save anything by setting up its own reserves?

Insurance companies operate on the basis of spreading loss. If experience shows that three persons out of 1,000 of a given

age will die during the year, they can sell each person a $1,000, one-year insurance policy for $3. This follows because $3 from each of 1,000 persons will pay $1,000 for each of the three dying. The company does not know which persons will die, but it knows three persons will die. Each person pays $3 to protect himself to the extent of $1,000. The large loss is spread over the group and becomes a low average rate. Fire insurance works on the same principle.

A local life insurance company is unsound because its risk is concentrated in a small area where an epidemic can wipe it out. A fire insurance company is unsound if its insured property is concentrated in a single business district because a conflagration can wipe it out. Likewise, a company is not in a position to carry its own insurance unless its property is widely scattered geographically; so the destruction of one *unit* will not be accompanied by the destruction of others at the same time. The units should be small and not physically connected, nor should they be so vital individually that the loss of one would disrupt operation of the business. If these conditions are not present, the loss will be too heavy for one company to bear and should be spread over a number of companies by insuring with a regular insurance company. Further, if the company is to carry the insurance, there must be a large enough number of units of property to give the law of averages an opportunity to work.

The company must create an insurance fund to offset the reserve created to cover insurance losses. Both the fund and the reserve must be practically full size from the start. Although losses tend to average out over a period of time there is no assurance that losses will be postponed until a fund can be built up gradually. The only safe procedure is to set up the full reserve out of surplus at the start. Then surplus can be gradually reimbursed by reversing entries for the amount charged to insurance each year. After surplus has been reimbursed in full, the insurance reserve can function on an independent basis. If the actuarial computations have correctly gauged the risk, the insurance reserve will not again be a drain on surplus.

Insurance Fund Investments.—The insurance fund should be kept liquid. When losses occur, the company's credit is frequently impaired. At such a time liquid resources are necessary to replace property promptly. This means that sufficient funds should be kept in certificates of deposit to meet ordinary losses. The rest of the reserve should be kept in readily marketable bonds, notes, certificates, and bills so that funds can be obtained on short notice.

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CHAPTER 26

DEPRECIATION

The Interstate Commerce Commission has defined depreciation as the "lessening in worth of physical property due to use or other causes." This definition which conforms to the etymological origin of the term in the Latin words *de,* meaning down, and *pretium,* price, will be used in this chapter.

The economics of depreciation is simple. No economic gain has been achieved until all decreases in the value of corporate property have been made good. Hence all loss of value of plant, machinery, and other perishable property must be accounted for. It is a cost of production. This process may be visualized by considering all perishable property as a deferred charge as follows:

Credits:		
Income during period	$100,000	
Plant at close of period	80,000	
Total credits		$180,000
Debits:		
Expenses during period	$ 70,000	
Plant at beginning of period	100,000	
Total debits		$170,000
Net profit		$ 10,000

or by the conventional income account method,

Income		$100,000
Less: Expenses	$ 70,000	
Depreciation	20,000	
Total deductions		90,000
Net profit		$ 10,000

Depreciation Accounting.—The usual method of accounting sets up the cost or value of an item of plant upon the books of the company. A reserve is then accumulated against this

plant account by periodic charges to current expenses. The accounts would be as follows:

Machine #10

Debit	Credit
$100,000	

Depreciation Reserve Machine #10

Debit	Credit
	$20,000

Depreciation Machine #10 (Expense)

Debit	Credit
$20,000	

The balance sheet would show under assets:

Plant	$100,000	
Less Reserve	20,000	
Net Plant		$80,000

The income account would show:

Sales	$100,000
Expenses	70,000
Depreciation	20,000
Net earnings	$ 10,000

It is here assumed that the machine has a life of five years. Hence, one-fifth of the value of the machine should be charged to the operating costs of each yearly period. It is customary for corporations to study the lives of the various items of property. After the average life of a class of items has been established, the value of the property less any salvage value is written off at such a rate that the value will have been amortized by the end of its life. The use of average lives gives substantial accuracy to these methods in that long-lived items tend to counterbalance short-lived items so that aggregate charges are substantially correct.

There are many methods of computing depreciation. When machines wear out rather than become obsolete, charges may be based on hours of use. Other methods take account of compound interest considerations. However, most property deteriorates with the weather—a time factor—or becomes obsolete. Consequently, most corporations use simple "straight-

line" methods of accounting in which the whole amount to be written off is spread uniformly over the life of the item.

Optimum Depreciation Charges.—The heart of the depreciation problem is the correctness of depreciation charges. Theoretically, the proper charge is one which exactly measures the loss of value of the particular asset, or, in the case of the composite charge, of the entire assets. Practically, however, the actual charges may exceed or be short of the actual losses in value. Because of these discrepancies one must scrutinize statements carefully to judge whether earnings are over- or understated as a result of variations of charges from the optimum. Thus from 1922 to 1931, Shell Union Oil Corporation charged out from its statements to stockholders $37,500,000 more depreciation than was deductible under federal internal revenue regulations. On the other hand, many companies seem to charge out unreasonably small amounts for depreciation. For example, many of the electric light and power companies have charged out depreciation at the rate of ½ of 1% and ⅓ of 1% of fixed assets. Even granted that a substantial amount of the property accounts may represent land, a 200-year or 300-year composite life seems unreasonably long.

Depreciation of Inflated Property Values.—As has been pointed out in other chapters, consolidations frequently produce inflated property accounts. This inflation must not be lost sight of in studying depreciation policies. It may affect depreciation policies in two ways: (1) depreciation may be charged off at a rate that will provide a fund just ample to replace the unit of property involved; or (2) it may be charged off at a rate which will permit elimination of the inflated book value of the asset. The first policy has been pursued extensively in the electric light and power industry. It keeps the operating property intact, but fails to remove the inflation from asset accounts. The second policy has been pursued in many of the more prominent industrial consolidations: for example, by United States Steel Corporation. This policy "squeezes out the water" because the inflated book values are

written off and cash flows back into the business in amount equivalent to the old book values. Under this policy of depreciation accounting the plant may be expanded greatly from earnings in the guise of depreciation charges. Eventually sound asset values are built up behind the securities which were issued against water in the consolidation processes.

Earnings Test of Success of Consolidations.—When assets have been inflated in the consolidation process, published earnings figures may not be a true test of the success of a consolidation. If depreciation charges are increased to a point at which inflated property accounts are written off, the true net earnings may be grossly understated. This understatement will in turn give a false picture of the merits of the consolidation. For this reason most published studies of the success of consolidations are not to be taken too seriously.

Per Cent Efficiency Argument.—Although a matter for more specialized treatises, the per cent efficiency method of computing depreciation deserves attention here because it is very frequently presented in connection with consolidations. This method assumes that if a plant is operating, for example, 85% as efficiently as a new plant could operate, it should be valued at 85% of the cost new. Hence, the depreciation reserve should equal 15% of the cost new. The fallacy in this reasoning is obvious, yet regulatory commissions have been befogged by it on several occasions.

The objection to the method is as follows: property is valued for the services it will render; that is, the future services are discounted in price paid for machine, plant, etc. The amount of these services will be the result both of the efficiency of the plant and the period during which it will function. Clearly a machine which will produce a given quantity of output for five years is not worth so much as a machine that will produce the same annual output for ten years, even though the efficiency of each machine is the same. The valuation and depreciation methods must recognize that a diminution of service life results in a diminution of value.

Recognizing Present Values.—Ideally, to know the exact economic change that a business has undergone, one should restate the value of all property as of the end of the particular period. Practically, however, this cannot be done exactly, for a continual policy of restatement is too costly. Hence original values in property accounts are left, for the most part, unchanged. However, in periods of marked price changes, substantial numbers of companies revalue their assets upward or downward to the selected price base. Depreciation is then charged on the new book value.

The theory of this practice is simple: if plant worth $10,000 is worn out in producing goods, then the selling price of those goods should bring in $10,000 above other costs of producing them before a profit can arise. The present value of the plant destroyed is the test of the adequacy of the present charge allocated to the cost of the product. The following extract from the *United Business Service* of July 22, 1933, sets out with delightful clarity the theory of considering replacement costs:

It is often assumed that in times of advancing prices and general expansion, practically any business cannot fail to make money. The grain of truth in this statement is merely that it is harder to fail under such conditions than in times of general deflation. Nevertheless, many a firm has gone through a period of rising prices, done a large and apparently growing business, and yet found itself with little substantial profit at the end.

The cause, when analyzed, is simple. Prices were based on past costs, not replacement costs. For example, a merchant buys an article for $1.00. He adds his percentage of mark-up and sells the article for, say, $1.30. But the sale is not immediate; a considerable period elapses between purchase and sale of the merchandise. During that time the wholesale price has advanced to $1.15. His books show that he has made a gross profit of 30c but it costs him $1.15 to replace the article sold. So when his shelf is restocked, he has really made only 15c.

If he does not divert part of his book-profit back into the business, he must find new money elsewhere to maintain his stock which, of course, is his actual capital, no matter how he may figure it in dollars. If a firm's capital is being actually depleted by distributing as profits

(through deceptive accounting) what is actually capital, then the firm's business position is really being undermined in a subtle but effective way. Unless capital, measured in dollars, increases with rising prices, the real capital is in fact shrinking.

Manufacturers are subject to the same difficulty. Selling prices are based on present production costs—material, overhead, labor, plus profit. If when more material must be bought, the price is higher, or labor costs have increased, the same goods cannot be reproduced at the same outlay. Therefore, part of the profit on the previous sales has been illusory.

To avoid this difficulty in the face of advancing prices, we recommend that prices be based on present replacement cost; that when orders are taken on this basis, material be ordered covering all requirements before it gets a chance to advance, and that wage contracts cover definite periods of time, so that they may be depended on within the period. Watch all items so as not to permit replacement costs to run up ahead of selling prices for finished products. The firm that fails to do this is likely to experience a relatively "profitless prosperity."

Effect of Revaluing Assets.—There can be no objection to stating assets on the books at their exact present value. Indeed this practice would be ideal. However, revaluations may result in book values which exceed or fall short of the real values of the assets. As has been pointed out, these book values tend to be excessive at the time of consolidation. Likewise, when assets are written down, the write-downs tend to be excessive. In the first case, the promoters of the new consolidation are trying to show equities behind large amounts of securities. In the second, the managers are trying to make a good earnings showing. The incentives in either case tend to lead to excess. Between 1932 and early 1935, revaluations and capital reductions neared a mass movement. During that period many of the newer consolidations revalued their assets. Their motive was a frank desire to show profits in a period of deficits or of small earnings. The *Wall Street Journal* presents the Consolidated Oil Corporation case thus:[1]

Although no definite amount has as yet been arrived at, the write-down in the balance sheet valuation of the capital assets of the new

[1] February 22, 1932, p. 2.

Consolidated Oil Corp., to which Sinclair Consolidated Oil Corp. will change its name and which proposes to acquire Prairie Pipe Line Co. and Prairie Oil & Gas Co., would be not less than $100,000,000.

The benefit of the reduction in capital asset valuation would be reflected in the income account. This would arise through the commensurate reduction in the charge-off for depreciation and depletion. Exactly how much the reduction would be is not at present indicated, although $10,000,000 would not be a high estimate.

In the report of Sinclair Consolidated Oil Corp. alone for the year 1930 a deduction of $22,541,605 was shown for depreciation, depletion and amortization. This was approximately 8% of the net valuation of $285,923,421 placed on fixed assets. For the first six months of last year the charge-off amounted to $11,514,181, and the influence of this item may be seen in the fact that it changed a profit of $1,099,093 into a net loss of $10,415,188 after its deduction.

The effect of revaluations is to change the base on which depreciation charges are computed. If this base is not a correct value, then depreciation rates based on the correct life of the asset will not give a true annual depreciation charge. Both rate and base must be correct if a correct amount is to be determined. This danger requires the analyst to examine both the base values and the rates to determine the validity of reported earnings figures. A further effect of revaluations is to destroy in substantial measure the comparative value of past earnings figures. These points are vividly illustrated by the following item taken from the *Wall Street Journal* of April 7, 1934:

Sharp contrasts in net results are presented in recent reports for 1933 of the Texas Corp., Gulf Oil Corp. and Continental Oil Co. The Texas Corp. showed net loss of $491,004, against net loss of $2,161,841 in 1932, while Gulf went heavily into the red, reporting net loss of $11,386,387 for last year, compared with net profit of $2,743,492 in 1932. Continental Oil Co., on the other hand, swung from a net loss of $1,444,133 in 1932 to a net profit of $2,275,860 last year.

However, the Continental Oil Co. profit was entirely due to a new basis of valuations as of October 31, 1932, made effective December 31, 1932. Last year was the first to reflect the lower charges for depreciation and depletion as a result of heavy write-down in capital assets. Texas Corp. continued to deduct reserves heavily on the

usual basis, as did Gulf Oil Corp., though the latter, as in the 1932 report, showed intangible development costs capitalized instead of being charged out as expense, as formerly.

Continental Oil Co. states that the charges for capital extinguishments for 1933 were lower by $4,517,943 than they would have been had not the revaluation taken place. The write-down, of course, was in line with the policy of many other companies in and out of the oil industry. In addition, the Continental report last year contained extraordinary items totaling $1,403,168, consisting of $1,306,954 profit on sale of investment in Sealand Petroleum Co., Ltd., a British marketing subsidiary, and $96,214 increase in equity in Kettleman North Dome Association resulting from readjustment of ownership.

The following tabulation gives a comparison of the results of the three companies in 1933 and 1932:

	Texas Corp.	Gulf Oil	Continental
Profit before reserve and extraordinary items	$36,279,668	$21,725,383	$6,827,904
1932	35,048,441	32,080,356	9,595,999
Profit on bds. purchased	....	....	16,017
1932	....	....	99,921
Non-recurring income	....	d502,365	1,403,168
1932	....	5,511,828	....
Intangible development costs	3,756,417	....	1,239,258
1932	2,716,940	....	1,784,463
Reserve for depreciation and depletion	33,014,255	32,609,405	4,731,971
1932	34,493,342	34,848,692	9,355,590
Net loss	491,000	11,386,387	p2,275,860
1932	2,161,841	p2,743,492	1,444,133

p = profit.

Thus, before intangible development costs, reserves for depreciation and depletion and other special items, Texas Corp. did the best of the three last year. The corporation earned $1.18 a share in the last half of last year, making up all but $491,004 of its net loss of $11,500,000 for the early half of the year.

Renewal and Retirement Accounting.—Renewal and retirement accounting differ from depreciation accounting in that they do not charge property off periodically over its life. In renewal accounting, used extensively for certain types of railroad property, the cost of the original items is set up in the plant accounts. Thereafter the original plant figures are not disturbed; but as items are replaced, the cost of the new replacements is charged as an expense of the period in which

the replacement occurs. Retirement accounting sets up each new item in the plant account. When an item is retired, the whole cost of the item retired is charged to the expenses of the period in which retirement occurs. This method of accounting is followed by the uniform system of accounts for local public utilities. The essential difference between renewal and retirement accounting is that the former charges the cost of the new item as a current expense; whereas the latter charges the cost of the retired item as a current expense.

The theory of renewal and retirement accounting is that the items of property go out of service uniformly. Hence, under stable price levels depreciation, renewal, and retirement accounting produce the same charges against earnings. For example, suppose an electrical distribution system has grown up gradually over a period of 15 years; each year 100 poles were added; the life of poles is 15 years; the cost of poles in place is $60 each. After the system is completed at the end of 15 years, the various methods would give results as follows:

Depreciation Accounting

Plant—1,500 poles, cost	$90,000
Annual rate of depreciation	6⅔%
Annual depreciation charge	$6,000

Renewal Accounting

100 new poles set in place, cost	$6,000

Retirement Accounting

100 old poles retired, cost	$6,000

In each case the charge is the same. Under stable prices the charge will remain the same indefinitely if the property has matured so that the number of poles will remain the same from year to year. Since they were put into service at the rate of 100 poles per year, 100 poles will reach the retirement age each year and be replaced. Fifteen-year cycle will follow fifteen-year cycle.

Under the assumed facts, the method of accounting appears to be a matter of indifference. But suppose that price level changes and that poles now cost $70. If the depreciation and retirement methods are based on original cost, the different

methods will pull apart. The renewal method will immediately show a charge of $7,000 for 100 poles and continue at $7,000. The retirement method will show $6,000 each year for 15 years because it is retiring old costs. Then it will jump to a $7,000 charge because the $70 poles are being retired. The depreciation method will show a gradually increasing annual charge. At the time the poles rise in price, the annual charge will be $6,000. The next year the plant account will consist of 1,400 poles at $60 and 100 poles at $70. If we depreciate these for a 15-year life at 6⅔%, the charge will now become .06⅔ times $91,000 or $6,067. Thereafter, owing to the replacement of 100 poles at $10 additional cost per pole, the plant account will increase by $1,000 each year, and each year the depreciation charge will increase to the extent of 6⅔% of this increase in the plant account or at the rate of $67 per year until the entire plant account is on the $70 pole level.

From this example it is clear that the use of original costs in depreciation and retirement accounting under conditions of changing price level will cause divergent charges to expenses and, consequently, variations in earnings reported to the security holders. In case prices are rising, renewal accounting reflects the actual loss of economic values most quickly, depreciation accounting next, and retirement accounting last of all. In case prices are falling, current replacement costs are reflected in the same order. Retirement accounting prolongs low charges during rising prices and prolongs high charges during falling prices. Renewal accounting adjusts immediately. Depreciation accounting lies between the other two methods. The analyst may well ponder the effects of these methods in analyzing current income statements.

Irregular Retirements.—Most property does not fit the simple conditions assumed in the electrical distribution systems. Large buildings are used which are replaced at distant and irregular intervals. Machinery goes in and out of service without reference to an orderly schedule. Also property accounts do not grow in an orderly, uniform fashion. Under straight renewal and retirement accounting, replacement of

large items causes very irregular charges to expenses and hence causes wide fluctuations in reported earnings. Managements long ago recognized these variations as undesirable. Consequently most renewal and retirement systems are modified by the use of reserves. In railroad accounting the irregular items are accounted for by depreciation accounting methods while the ties and rails are left to the renewal method. In public utility accounting, where depreciation accounting is not used, a retirement reserve is set up in order to equalize charges to current expenses. Large irregular items are charged in whole, or in part, against this reserve, and then the reserve is rebuilt by subsequent gradual charges to current expenses or by "appropriations" of surplus.

Use of a retirement reserve for large irregular items of property is unsound. The gross earnings of the period in which the values are destroyed should be burdened with the expense charges, and the charges should bear a direct relationship to the values destroyed. Depreciation accounting does this. If the retirement reserve is so arranged that it produces this result, it is nothing but depreciation accounting under another name and hence should give up its disguise. If retirement reserve charges do not give this result, then they distort the true earnings of the period and become a potent instrument for earnings manipulation. Particularly reprehensible is a regular practice of "appropriating surplus" to the retirement reserve. This practice indicates that the management is failing to show full depreciation expenses and thereby advertising larger net earnings than are really materializing. Having accomplished the deception, the management then fixes up the retirement accounts by appropriating book surplus back into the retirement reserves.

The renewal reserve operates in the same way as the retirement reserve and is subject to the same criticisms.

In both retirement and renewal accounting, charges can be shifted from one period to another by deferring the retirement or renewal. Under retirement accounting new units replacing old units may be installed and entered in the plant account although the old ones have not been charged off. They may be

kept as "reserve" equipment, and thus the day of charging them off be postponed. In renewal accounting, property may be left in service after it should be replaced. Later, the renewals may bunch up. This is particularly true of railroads during depression. Equipment gets into bad order and is placed on sidings; road beds deteriorate; ties and rails are not replaced on the usual basis. Later as volume traffic returns, net earnings lag behind gross revenues. In large measure this lag is due to the making good of "deferred maintenance," the rehabilitating of property that should have been renewed in the prior depression period. The effect is to understate net earnings in the one period and to overstate them in the other.

Valuation Reserves.—The three types of accounting give quite different sizes to reserves. In a matured property approximately one-half of the property values will have completed the inexorable march to the scrap heap. Consequently, the depreciation reserve will approximate half the new cost of the plant. The net plant figure will thus be about half the original figure. Under renewal or retirement reserve accounting the reserve is only large enough to equalize renewals or retirements. This reserve usually approximates 5% to 10% rather than 50%. Consequently, there is no reserve account which can be deducted from the plant account to show its approximate value. Deduction of renewal and retirement reserves gives an inflated figure for plant account. It is probable that some of the public utility managements were interested in promoting retirement accounting because it gave a deceptive appearance to plant accounts and hence to earnings on investment.

Causes of Depreciation.—A study of the causes of depreciation is imperative if the lives of the various items are to be closely estimated. Each item will depend on its own factors, and these will change from time to time. Since the property is to be written off over its life, the factor that causes most rapid loss of value is the effective factor in the fixing of depreciation rates. For example, property may wear out in 40 years, but if new inventions will make it obsolete in five years,

obsolescence rather than wear and tear will be the effective factor. Hence the property should be written off on the basis of a five-year life.

Among the many causes of loss of value are changes in price level, accidental damage or loss, inadequacy, obsolescence, wear, tear, action of the weather elements, fatigue, decrepitude, legislative interference, and improper maintenance. For practical purposes, these causes are usually grouped on a time basis. Those factors which cause loss of value only when plants are operating, e.g., wear and tear, are accounted for on an operating basis. Those factors which are a function of the passage of time—e.g., weather and obsolescence—are accounted for periodically on a passage of time basis. Most items depreciate on this latter basis.

Depreciation vs. Maintenance.—The life of property depends upon the liberality with which it is maintained: paint prolongs the life of wood and metal; repairs in time prevent unmeasurable damage to machinery; proper oiling and greasing prolong the life of wearing parts. Consequently, the rate of depreciation, and, hence, the annual charges will vary with the maintenance policies in force. For this reason, analysts frequently study the combined depreciation and maintenance figures rather than the separate depreciation figures. A reduction in maintenance should produce a larger allowance for depreciation.

Standard Rates of Depreciation.—Large corporations—notably the telephone companies—trade associations, and the Bureau of Internal Revenue have made extensive actuarial studies of business property. The life tables derived by many of these companies are far more nearly accurate than are tables used in computing life insurance premiums for individuals, though it should be observed that the life insurance companies have much more nearly accurate information than that contained in the conventional tables that they use.

In the course of these studies, rates have been standardized for certain types of property. The following rates are

taken from *Depreciation Studies,* Preliminary Report of the Bureau of Internal Revenue.

For the analyst, item rates are less significant than composite rates for entire properties. However, it is difficult to derive composite rates for entire industries because the property components vary from company to company. If the land elements bulk large, the composite rate should be low. If plant

STANDARD DEPRECIATION RATES
(Source: Bureau of Internal Revenue)

Type of Property	Probable Useful Life Years	Rate %
Apartment buildings		
Brick	40	2½
Barns		
Brick	50	2
Frame	28	3½
1-Family dwelling		
Brick	50	2
Frame	33	3
Garage private		
Brick	50	2
Frame	25	4
Machine shops		
Brick	40	2½
Frame	25	4
Office buildings		
Brick	40	2½
Stores		
Brick	50	2
Elevators		
Freight	25	4
Passenger	20	5
Boilers and furnaces .	20	5
Radiators	25	4
Lighting fixtures . . .	15	6⅔
Plumbing fixtures . .	25	4

Type of Property	Probable Useful Life Years	Rate %
Tractors	6	16⅔
Cabinets and files .	15	6⅔
Concrete pavement . .	20	5
Pipe bending machines	10	10
Locomotive boilers . .	10	10
Steam boilers	13	7½
Hopper cars	10	10
Tank cars	12	8⅓
Standard gauge locomotives	11	9
Pneumatic riveters . .	3	33⅓
Steel mill machinery .	20	5
Blast furnaces	20	5
Puddling furnaces . .	17	6
Concrete standpipes .	50	2
Welding equipment .	10	10
Power printing presses	15	6⅔
Typesetting machines .	15	6⅔
Rubber tube machines.	15	6⅔
Vulcanizers	15	6⅔
Looms	30	3⅓
Cotton gins	20	5
Cigarette machines . .	15	6⅔
Gathering pipe lines .	10	10
Trunk pipe lines . . .	25	4
Filling station pumps .	10	10

is rented and machinery has a short life, the composite rate should be high. Thus a composite rate of between 3% and 4% should probably be found among the large area electric power companies. But a company like Pacific Gas and Electric Company with large investments in land, water rights, etc., should clearly have a lower rate than the general run of scattered properties. Likewise, a large city system with large investments in land and underground facilities and rights of

way will tend to have a lower than average composite rate. Some day regulation may require financial statements to give more detailed information, but for the present the analyst must grope with broad averages.

Repairs and Maintenance.—Reserves are not ordinarily used for repairs and maintenance. Repairs are expenditures which make good an injury or impairment of property which is chargeable to the current operating period. Since these costs are allocable to the current period, there is no necessity for a reserve to equalize them over a cycle of years. Maintenance expenses are likewise outlays to keep property in sound condition and are allocable to the current period. The term mainteance is sometimes made to cover depreciation. Thus in the uniform system of accounts for railroads depreciation charges are reported under the caption "Maintenance." In such cases the reader must make allowances for the lax use of terminology.

Depletion.—Depletion differs from depreciation in that in depletion a part of the asset—e.g., coal, iron ore, oil, etc.—is severed from the remainder and sold; whereas in depreciation the asset is retained but loses value. As in the case of depreciation, depletion is a cost of production. No profit has been made until the value of the assets sold has been deducted from gross income. To show the loss in value of the asset, a depletion reserve is set up. To show the cost factor in gross income, a depletion deduction similar to the depreciation deduction is made on the income statement. The amount of the charge varies with the amount of the coal, iron ore, copper, oil, natural gas, or other resources severed and sold during the period.

Funded Reserves.—A reserve is said to be funded when a fund of assets—usually cash or securities—is set aside and earmarked for the purpose for which a reserve was created. The creation of funds is not a reserve problem at all. It is primarily a budgetary problem. The management could set up a fund for a particular purpose without creating a special

reserve to offset it. For the most part, this is business practice. Extensions, betterments, and replacements are provided for in the cash budget. Occasionally, an earmarked fund and separate bank account are created, but only seldom is surplus earmarked into separate reserves, and very infrequently is a depreciation reserve entirely funded. Such practices are not common among the larger corporations.

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CHAPTER 27

DIVIDEND POLICIES

Theoretically and, for the most part, practically, the corporation is run for the benefit of its stockholders. The dividend policy, then, should be based on the requirements and circumstances of the stockholders. Of course, in the practical work-a-day world this means the stockholders whose votes elect the directors. No management can last for longer than a current term unless it meets the wishes of the controlling group.

What are the interests of the stockholders and how do these individuals' interests mesh with short- and long-run functioning of the corporation? These can best be discussed in sections dealing with the different aspects of the problem.

Form of Dividend.—Dividend payments have ranged from $120,000,000 to $880,000,000 per month for the past ten years. The accompanying table shows monthly and annual distributions.

Most dividend payments are made in cash. However, in many cases, the corporation is not in a position to spare cash. Growth of business may have required larger inventories, larger receivables, or new facilities. In this case the cash will be locked up in goods. A cash distribution would seriously deplete the liquid resources of the corporation. Under such circumstances the corporation may resort to substitute forms of dividends. If cash is expected shortly, scrip may be issued. Scrip is merely the corporation's promise to pay the dividend in cash at a future date. The stockholder can sell the scrip like any promissory note. The scrip becomes a liability of the corporation. In fact, any dividend, once declared and announced, becomes a legally enforceable obligation of the corporation ranking as a creditor's claim.

(2) If the corporation cannot spare cash in the near-term future, the directors may declare a bond or stock dividend. The bond maturity may be made distant so the corporation will have the use of the funds for a long time. In the meantime, the stockholder will have a salable security from which he can raise cash or from which he will receive an interest income. Stock never comes due. Hence, the management can permanently retain funds evidenced by a stock dividend. The stockholder will be entitled to dividends on the enlarged issue or can sell his extra shares for cash.

DIVIDEND PAYMENTS, 1928-1937
(Source: Babson and *New York Times*)
(In thousands)

Month	1928	1929	1930	1931	1932
January	$216,600	$332,800	$482,000	$436,500	$202,300
February	160,100	219,600	281,500	352,900	366,996
March	166,500	243,800	310,700	273,500	250,405
April	179,660	242,200	298,200	269,800	161,770
May	133,000	204,300	285,500	244,000	281,120
June	147,000	219,400	302,200	262,500	216,662
July	244,400	339,500	366,400	408,500	122,561
August	147,300	202,600	227,700	203,200	246,112
September	144,500	222,100	237,700	210,000	156,599
October	212,700	314,500	296,500	261,000	133,344
November	162,000	260,800	247,000	215,450	264,189
December	180,700	268,700	255,000	208,300	205,769
Total	$2,094,460	$3,070,000	$3,590,400	$3,336,150	$2,607,827

Month	1933	1934	1935	1936	1937
January	$164,840	$201,854	$181,107	$228,328	$233,330
February	222,244	212,413	212,606	273,649	358,909
March	162,468	177,807	202,987	200,042	249,401
April	130,607	162,170	130,960	162,174	222,277
May	218,591	264,155	323,523	409,533	522,083
June	211,890	217,544	219,253	263,830	342,748
July	166,211	113,295	145,776	236,196	253,111
August	211,432	245,625	256,594	331,918	384,779
September	164,629	162,704	185,305	231,730	288,290
October	123,492	140,477	157,809	233,697	293,987
November	259,518	343,031	398,020	880,262	713,805
December	192,015	231,750	301,403	437,541	453,869
Total	$2,177,937	$2,472,825	$2,715,343	$3,888,920	$4,316,589

Under the 1936 Revenue Act and court decisions a stock dividend is not immediately taxable as income to the stockholder unless it changes his proportionate stock interest in the company. The legal theory is that if the stockholder merely has more shares representing the same proportionate interest in the aggregate ownership of the corporation, he has not received taxable income. However, if he later sells the shares, he can report the cash received as income or can consider the amount received as a deduction from the price originally paid for the shares on which the stock dividend was declared. In the first case he pays the tax on the income as reported. In the second case he pays no tax until he finally disposes of the original shares. Then he pays a tax on the capital gain represented by the difference between the adjusted original purchase price and the selling price. Whether the stockholder reports his income one way or the other depends largely on the probable trend of share prices, the period for which he expects to hold, and the surtax bracket applicable to his income. All forms of dividends except stock dividends must be reported as income, when received.

3 Corporations sometimes declare dividends payable in various kinds of property. During and following the World War, dividends were occasionally paid in the bonds of governments which had purchased war materials from corporations. These bonds had been accepted as payment on contracts, and the corporations felt that it would be better to distribute them directly to stockholders rather than to liquidate them and then distribute the cash. When the Eighteenth Amendment was repealed, one large distillery corporation paid a dividend in whiskey. 4 A more common type of property dividend arises in connection with partial liquidations. The proceeds from liquidations are known as liquidation dividends. In such cases items of property are frequently divided among stockholders. 5 But in many cases a business decides to get out of some profitable line of business. It may decide that for business or legal reasons the particular line should be separated from the parent. But whatever the cause the usual practice is to organize a new corporation to purchase the division. The new

corporation pays for the property with its securities. These securities are then paid to the parent company's stockholders as a dividend. It was by this process that in 1925, General Electric Company divorced itself from Electric Bond and Share Company when the attitude of the United States Senate made severance of the connection between the companies desirable. The Electric Bond and Share Securities Corporation was organized to purchase General Electric's holding of Electric Bond and Share Company stock. The securities company then issued the number of shares desired for distribution to General Electric stockholders in payment for the holdings. These were then distributed to the General Electric stockholders, thereby shifting control from the General Electric Company to its stockholders. Other examples of this practice were mentioned in the chapters on holding companies.

Ability to pay a cash dividend depends upon the cash position of the company. Analysis of the cash position involves all the factors which affect working capital. As these factors are discussed in the chapter on working capital, they need not further detain us. However, it is well to note that presence or absence of surplus cash is one of the most important factors in determining dividend policies. In most states it is possible to borrow money with which to pay dividends. There are exceptions. For example, the Georgia statute requires that no dividend increase the corporation's debts. However, such a restriction is of slight effect since available cash can be used and then replenished by borrowing for working capital purposes. Nevertheless, borrowing in order to pay dividends is considered unsound and a confession of financial weakness. Consequently, any substantial amount of such borrowing is injurious to the credit standing of the company.

Scrip Dividends.—Bond and scrip dividends are likewise viewed as signs of weakness—particularly scrip. They are more injurious to credit standing than outside borrowing because they represent a form of debt incurrence which does not require the corporation to meet the credit tests of an outside lender. As a general rule, such dividends should be

scrupulously avoided. They excite suspicion, create a debt which may come due to embarrass the company, and increase the fixed charges which must be met periodically. Ordinarily, if the company's circumstances require that cash be withheld, its credit position requires that dividends not be declared. If the company can borrow through regular channels, it will normally do so rather than pay dividends in promises to pay. If it cannot borrow, it should not pay dividends.

Property dividends are irregular distributions based on special circumstances. Each case must depend on its merits. The liquidating type of dividend is the most common, and for practical reasons this is usually the way to handle the matter. Where a separate corporation is organized to take over a division of the business, four possibilities result: the corporation can retain the securities of the new enterprise; it can liquidate them gradually; it can sell them to a syndicate as a whole; or it can distribute them to its stockholders. If separation is desired, the parent corporation cannot retain the securities. If the cash is not needed in the enterprise, the stockholders will frequently be better off with the securities than with the cash derived by wholesale liquidation. However, with the thinness of markets which has developed under New Deal restrictions, it is probable that in most cases syndicate liquidation will bring more than piecemeal liquidation. This accounted for the proposed syndicate liquidation in 1937 of the holdings of General Cable Corporation and of American Smelting and Refining Company in the Revere Copper and Brass Company. These holdings represented blocks of 54,653 and 44,148 shares of class A stock respectively. This is probably the best way to liquidate for cash.

Stock Dividends versus Cash Dividends.—During the decade 1921 to 1930 there was considerable public discussion of the question of whether for a growing company stock dividends were preferable to cash dividends. The alleged advantages of the stock dividend policy were thus set forth by Frank L. Dame, president of the North American Company:[1]

[1] *Wall Street Journal,* June 19, 1930, p. 10.

A great deal has been published in recent years about stock dividends. There are, of course, several variations, including the occasional stock dividend, the periodic combination dividend paid in cash and stock, and the regular dividend paid either in cash or stock at the option of the stockholder. But I am concerned only with quarterly dividends on common stock paid only in common stock, which has been the policy of the North American Co. since 1923.

To state the reasons for our dividend policy is to state its principal advantages, which consist in:

> Providing an automatic method of financing, with reasonable cost to the company and without burden to the stockholder, part of the capital continuously necessary in the public utility business.
>
> Giving a satisfactory return to the stockholder and enabling him conveniently to choose the form of it each quarter either as immediate income or investment, the former by easily converting his dividend stock into cash, the latter by keeping his dividend stock and retaining his proportionate interest in the growing equity without sacrifice of potential profit. Retention of the dividend stock has proved to be equivalent to employment of one's income profitably, without loss of time and without having to provide additional cash to make up a minimum investable amount. Thus, the stockholder immediately puts his dividends to work, which is an important principle of wise investment.

Therefore, the regular stock dividend, when soundly adapted to the situation, is the short cut to increased investment holdings without additional financial outlay by the stockholder.

Its dividend policy automatically provides the North American Co. with a fair proportion of the capital needed for investment in the equities of its subsidiaries without burdening its stockholders. A holding company must increase such investment in order to preserve balanced financial structures of its subsidiaries, which will enable them to obtain capital from the sale of bonds and preferred stocks at the lowest market rate. This is particularly necessary in the utility business because of its continuous growth.

To appreciate the advantages which regular stock dividends afford the stockholder and the company, one has only to compare that method with the general corporation practice of providing needed capital by giving stockholders from time to time rights to subscribe, at par or below the market price, for additional stock. Regular stock

dividends are, in effect, the same as cash dividends plus rights, but afford the stockholder the equivalent of more frequent and convenient subscription privileges than under the general practice referred to.

Moreover, the stockholder is not compelled to sell part of his subscription rights, as he is when cash dividends are less than the amount required for their exercise, and he finds it impossible to furnish the necessary cash from other sources.

Criticism of the Stock Dividend, Reinvestment, and Rights Policies.—During boom times, stock dividends and split-ups are likely to be much abused because of their influence on prices. The validity of the stock dividend policy rests very largely on the assumption of perfect management. It is assumed that the managers of the company are the best, indeed the only, judges of the best social use of the capital involved. It is questionable whether this is even approximately true. If earnings were paid out in cash dividends and capital was then sought from the public, the public could enforce its opinion as to the wisdom of expansion. It could either supply or withhold funds. This same argument applies equally well to policies of reinvesting earnings and of issuing rights. The latter policy of course is even more serious in that it can be used as a lever to force additional contributions of funds. This follows because the stockholder or his vendee is forced to exercise his right in order to protect his proportionate interest in the business. As a result, managements are in a strategic position to force unwise expansion.

The effect of the irregular stock dividend is usually substantially to reduce the price of the stock. Thus the 100% stock dividend of the Gulf Oil Company in 1937 cut the price of the shares in half. Such cutting has distinct advantages market-wise because more persons can buy a low priced share than can buy a high priced one. Hence, demand is strengthened and prices move up. In the Gulf Oil case, two shares sold for $20 more after the dividend than the old one sold for before.

The *New York Journal of Commerce* summarizes the situation in 1928-1929 as follows:[2]

[2] December 9, 1929, p. 4.

In the past two years an important factor in the stock market has been furnished by the dividend policy of the larger industrial concerns. In three ways they have done a great deal to help along the movement in prices—by split-ups, by stock dividends and by the issue of "rights." It has been often said that the use of these methods was a way of giving the stockholder his share in the growing prosperity of the enterprise resorting to them, while at the same time "conserving the cash" of the undertaking. This depends entirely upon the way in which the matter is looked at.

First of all, do these devices give the recipient any benefit whatever? When stock is split up or when stock dividends are issued or rights offered, they have no effect whatever upon the recipient unless he sells them. They may give him a little larger body of holdings either without cash payment or in return for a moderate purchase price, but unless the recipient sells them they merely give him stock which in the future will probably furnish him dividends on the basis of the old shares. Should he sell his holdings, he gets the market value of the new stock he has received. But suppose that the market itself is conservative or inclined to move downward—in that case he merely sells a part of his invested capital. In other words, he converts his savings into income.

The whole situation produced in this way then, is not necessarily helpful to the stockholder and may be rather detrimental to him. There is a minority of cases in which the split-up is warranted because of the overgrown quotation which the old stock bears, or for some similar reason, but these cases are relatively few. In the case of the stock dividend, it is rather doubtful whether such a distribution can be warranted under any ordinary circumstances if judged by the canons of good finance. Stock dividends used as regular methods of paying a return upon outstanding stock, as is the practice on the part of a good many enterprises at the present day, merits nothing except severe criticism. They simply add to the speculative element in the market.

It may well be questioned, too, whether the money obtained by corporations through the issue of rights and in similar ways does them much good from the general standpoint. An analysis recently made of about a billion dollars obtained by the issue of such rights shows that after deducting about 20% of the proceeds which were used for refunding, fully one-half of the remainder was employed in enlarging the stock market loans which these "others" were then making. Only half, at the utmost, of the sums so realized, were used

for actual new construction and extensions of the plant. It may well be doubted under existing conditions whether it was worth while to have had such extensions made at all in most cases.

A major objection to the stock dividend policy is that it lends itself to manipulation of accounting. The corporation is not forced to subject its accounting policies to the test of cash payments. It can go merrily on printing more stock and making more accounting entries so long as it can retain public confidence in its securities. The day of reckoning is thereby postponed with the possibility that the damage will be greater. A minor objection to the policy is that it lulls the stockholder into undue concentration of his holdings.

It is interesting to note in connection with this discussion that the North American Company, chief exponent of the stock dividend policy, changed to a part cash, part stock dividend policy in 1934. The following explanation is taken from the *New York Times* of February 22, 1934:

Altering the policy as to dividends on the common stock that had been in effect since 1923, the directors of the North American Company declared yesterday a cash dividend of 12½ cents and a stock dividend of 1%, payable in common stock. Two per cent in common stock had been paid on the common stock previously. The regular cash preferred dividend of 75 cents a share was also declared.

"The policy inaugurated in 1923 of paying all dividends on the common stock of the North American Company in its common stock has contributed in large measure to the strong financial position which the company and its subsidiaries have maintained throughout the depression," J. F. Fogarty, president of the company, announced after the meeting.

"The action of the directors today in declaring part of the dividend on the common stock payable in cash reflects their opinion that, while present conditions continue, part of the available earnings should be paid to the common stockholders in cash rather than retained entirely for investment in the business as heretofore.

"It is believed, however, that providing part of the funds for capital additions of subsidiaries, which are necessary even under existing conditions, and other investment opportunities will afford profitable employment of the funds retained through payment of part of the dividend on the common stock in common stock.

"Construction programs of our subsidiaries have been materially curtailed during the past two years and the expenditures which it is anticipated will be made for 1934 are considerably less than those for 1933. The policy of keeping such expenditures at a minimum consistent with the expanding requirements of the territories served will be followed until those requirements again reach the rate which has heretofore been normal."

The company will maintain the policy of offering its stockholders a choice between receiving that part of their dividends payable in stock either in stock or in cash resulting from the sale of the stock or scrip at the holder's orders, or of buying or selling sufficient scrip to constitute round shares. Edison Securities Corporation, a subsidiary, is maintained for the purpose, and for years the stockholders have been able to leave standing orders with the company, changeable at any time, covering the plan that best suited their purpose.

Later the company changed to an entire cash dividend policy.

Regular versus Irregular Dividends.—Most students of corporation finance favor regular rates of dividends. It is generally held that a corporation should fix a regular rate that the stockholder can depend upon period after period. If more liberal disbursements are desired, the directors should declare the regular dividend and then declare an extra dividend to absorb the excess. In this way the stockholder and the prospective purchaser of stock are put on their guard as to the rate of dividend that can be regularly expected. The arguments in favor of this policy are two-fold. (1) From the standpoint of market values, certain classes of investors purchase regular dividend-paying stocks but do not purchase others. This broadening of the market makes for higher stock prices. High prices help the corporation in new financing and help the stockholder in case he sells or borrows on his holdings. In those states which use dividend records in the determination of legal investments for savings banks and trustees, the market for the company's bonds may also be helped by a consistent dividend record.

(2) From the standpoint of regulating incomes, the individual is distinctly helped if he holds the stock for investment. That class of individuals who are so constituted that they can-

not save large returns and thereby equalize their spending are helped in spite of themselves. But quite aside from individual weaknesses, the corporation is in the best position to regulate the flow of income. The ordinary stockholder does not possess enough information about the company to predict earnings closely, much less to predict dividend payments. The directors are in an ideal situation to make good a part of this concealment of facts by regularizing the dividend rate. Further, since most stockholders are not in a position to influence dividend action, it is desirable that the directors equalize dividends over a period of years. Irregular, large payments may well push the stockholder's income into higher surtax brackets than would be the case with equalized distributions.

Special Factors in Dividends of Consolidations.—Certain consolidated companies have maintained very stable dividend rates and paid out most of their indicated earnings. This ability has been based on two foundations: (1) the diversification of business that the large enterprise has secured and (2) the inflation present in asset values. Though both of these have been discussed in prior chapters, the second requires further explanation.

The ability to pay a large proportion of indicated earnings and to keep the rate stable rests largely in the method of accounting for depreciation. As has been pointed out in the preceding chapter, it is not uncommon to write off inflated book values of assets over the life of the assets. To the extent that the depreciation charged is in excess of the actual values destroyed, earnings are reinvested in the company. This excess of charges forms a cushion to dividend policy. The charges as made not only provide an amount sufficient to replace expired property at current price levels, but a surplus available for the purchase of additional property. Since the property can be kept in excellent condition by this practice, a large proportion of the indicated earnings can be paid to stockholders without detriment to the business. Further, in case earnings decline, the depreciation charges can be decreased to a point permitting a better earnings showing. Obviously, all

this is faulty accounting, but so was the original inflation of assets on which it is based. The analyst must recognize that he is in the world of "what is" and not "what ought to be." As yet (1938), the Securities and Exchange Commission has not issued regulations on this point.

Reinvested Earnings versus Adequacy of Depreciation Charges.—Opposite to the practice of charging excessive depreciation is that of charging too little depreciation. This policy is frequently linked with a policy of extensive reinvestment of earnings. The effect of the policy can be seen from the following examples.

	Correct Depreciation	Understated Depreciation
Gross revenue	$1,000,000	$1,000,000
Operating expenses	500,000	500,000
Depreciation	150,000	80,000
Net earnings	350,000	420,000
Interest	175,000	175,000
Net income	175,000	245,000
Dividends	175,000	175,000
Surplus		70,000

It is obvious that the reinvestment of the $70,000 in the second case will make resources available for the replacement of property not adequately provided for in the depreciation allowance. Yet the result of this type of accounting manipulation is to inflate property accounts and to overstate earnings to the public. The amount "reinvested" is only sufficient to keep the property intact without growth. If the surplus account is to grow, expired property must be left in the property accounts so that there will be asset values to offset the surplus entries. Over a period of years there will be an apparent increase in investment and, earning capacity being equal, a decrease in the rate of earnings on invested capital. These are the progressive result of a policy of understatement of depreciation and overstatement of earnings. Wherever reinvestment is accompanied by a decreasing rate of earnings, one should examine the income statement critically. Frequently such conditions have

been passed over as a case of expansion under conditions of increasing costs or diminishing returns.

Liberal versus Conservative Dividend Policies.—A policy of reinvesting earnings in the business should be determined on a basis of the desirability of expansion as discussed in the chapter on expansion. Unless a fair return can be obtained on the new funds, they should be paid to the stockholders rather than reinvested. However, this does not mean that the corporation should not set up adequate reserves against contingencies. Analysis of the cash budget position should always take into account the probable future behavior of the business cycle, changes in competitive conditions, changes in costs which might affect profit margins, and above all a healthy skepticism of accounting estimates of depreciation and obsolescence. Once these problems have been agreed upon and suitable reserves set up to equalize regular dividends, the directors can then face the problem of reinvestment.

Assuming that expansion would prove profitable, the directors then face the question of retention of earning or sale of securities, or both.

The earlier American consolidations followed the policy of retaining a considerable portion of their earnings to finance expansion. In the decade 1920 to 1930 this policy was largely abandoned in favor of liberal dividend policies attended by expansion through the sale of securities. The former policy was the more conservative and the less likely to result in waste of assets. The liberal dividends of the later period were intended to make stocks attractive and thus facilitate their sale. Disclosures have since shown that in many cases the so-called earnings were the product of deceptive bookkeeping and that some of the large public utility holding companies resembled bucket shops.

However, despite the abuses that recent investigations have exposed, a reasonably liberal dividend policy accompanied by financing through the securities markets seems defensible. The nature of the industries in which the companies are functioning has much to do with the solution of the problem. The

large consolidations at the beginning of the century were for the most part industrials; whereas those of the last decade were for the most part public utilities. The rate of growth of capital investment has been very different for the two groups. In manufacturing the annual sales are, on the whole, larger than the invested capital. In public utilities the annual gross revenues usually amount to only from one-fourth to one-fifth of the book value of the assets. Even granting that public utility book values have been inflated, the utility still requires several times as much capital as does an industrial to expand its revenues by the same percentage. For this reason the industrial has been better able to expand through reinvested earnings than has the public utility. Since the rapid rate of growth of the period could not be financed entirely through earnings, it was necessary to make securities attractive to the public. This the companies did by means of liberal dividend policies.

What has been said in contrasting the two classes of companies is merely illustrative of a general principle. Whatever the type of company, if the rate of growth is to be faster than earnings can finance, then recourse must be had to the securities markets. If securities are to be sold, they must be made attractive to the public. A liberal dividend policy is essential to a good market for stock. The market places a higher value on a present income which can be immediately enjoyed than it does on reinvested earnings. Other things being equal a dollar of earnings paid out will sell at a higher price-earnings ratio than a dollar of earnings reinvested.

On page 456 are tables showing the dividend policies of several large corporations.

Dividends to Facilitate Sale of Stock.—Most of the present day consolidations are banker promoted. At the consummation of the plan large blocks of securities remain in the hands of bankers and other interested parties. As repeatedly emphasized, if the consolidated company follows a liberal dividend policy, these shares can be more readily distributed. Hence it is not uncommon to find a liberal dividend policy immediately after consolidation, followed later by a more con-

DIVIDEND POLICY—AMERICAN TELEPHONE AND TELEGRAPH COMPANY
(Source: Moody's *Public Utilities*)

Year	Net Income	Dividends	Percentage of Net Income Paid Out	Dividends per Share
1937	$182,342,866	$168,180,906	92	$9.00
1936	184,744,464	168,081,179	91	9.00
1935	132,918,493	167,960,475	126	9.00
1934	111,307,039	167,960,475	151	9.00
1933	100,508,464	167,960,475	168	9.00
1932	122,258,796	167,954,605	138	9.00
1931	176,063,308	163,588,474	93	9.00
1930	184,258,836	139,238,073	75	9.00
1929	201,259,808	116,378,711	58	9.00
1928	175,560,467	103,821,440	59	9.00
1927	151,037,961	97,379,934	64	9.00

DIVIDEND POLICY—PENNSYLVANIA RAILROAD COMPANY
(Source: Moody's *Railroads*)

Year	Net Income	Dividends	Percentage of Net Income Paid Out	Dividends per Share
1937	$27,278,639	$16,459,693	60	$1.25
1936	38,742,092	13,167,696	34	1.00
1935	23,849,798	13,167,696	55	1.00
1934	18,815,694	13,167,696	70	1.00
1933	19,281,169	6,583,848	34	.50
1932	13,573,536	6,583,848	48	.50
1931	19,941,490	36,161,805	182	3.25
1930	68,952,717	52,030,987	75	4.00
1929	101,487,062	46,835,965	46	3.88
1928	82,460,942	38,171,621	46	3.50
1927	68,217,256	34,949,502	51	3.50
1926	67,774,263	32,451,339	48	3.12
1925	62,375,182	29,950,404	48	3.00

DIVIDEND POLICY—CONTINENTAL CAN COMPANY, INC.
(Source: Moody's *Industrials*)

Year	Net Income	Dividends	Percentage of Net Income Paid Out	Dividends per Share
1937	$8,913,526	$8,753,012	98	$3.00
1936	9,038,788	8,970,608	100	3.25
1935	11,223,578	6,793,319	61	2.55
1934	10,707,123	5,326,732	50	2.72
1933	7,547,401	3,690,405	49	2.12
1932	4,819,323	3,899,540	81	2.25
1931	5,670,699	4,331,593	76	2.50
1930	8,738,094	4,333,922	50	2.50
1929	8,967,703	4,277,600	48	2.50
1928	6,690,796	3,589,312	53	5.00
1927	4,438,646	2,932,728	66	5.00
1926	3,734,183	3,318,884	89	6.00
1925	5,539,733	2,262,841	41	4.00

servative one. This policy is not restricted to consolidated enterprises but is fairly general. It is particularly prominent in periods of impending bad business when insiders attempt to unload under cover of increased or extra dividend payments. So prominent was the situation in late 1929 that the *New York Journal of Commerce* issued the following warning editorially:[3]

> It (stock selling) has been supplemented by an increase in some cases of dividend rate on the part of some concerns which probably will not be able to maintain the new rate if the depression of business should be at all prolonged. The fact that earnings have been good during the past year is not a reason for increasing dividends if the outlook for the enterprise is bad. It is as unwise to pay out money that belongs to a corporation at the wrong time as it is to avoid paying it out by the use of substitutes, or the use of substitutes at an inopportune time. On the present occasion there is difficulty in resisting the thought that current corporation financing reveals a number of cases in which effort is being made to inject some oxygen into the rather exhausted market in order to restore vitality. This may be a good thing for the patient or it may not, according to his condition. There is a possibility that it may cause a collapse as the result of too early resumption of activity.

Investments in Outside Enterprises.—It is common practice among large numbers of enterprises to retain earnings in the business but not to invest them in the regular facilities of the business. Instead, these earnings are used to purchase securities in outside enterprises. The policy may be defensible to the extent that the investments are taken temporarily for the purpose of giving a return on idle funds. But to the extent that the company is attempting to run an investing business along with its other business the situation is not so clear. The past record of corporate investments does not indicate that managements are successful investors because they are good operators. Much evidence points to the contrary conclusion that good operators are not successful dealers in outside securities. Further, the practice of making outside commitments leads readily to abuse. Purchases and sales may be made with a view to influencing securities in which the managers are

[3] December 9, 1929, p. 4.

individually interested. By and large, past experience has been unsatisfactory from the standpoint of stockholders in general. Whether large stockholders have come out ahead depends largely on the surtax brackets their incomes would have reached if the earning had been declared as dividends. It is probable that the excessive taxation of large incomes has had more to do with outside corporate investments than any other single factor, but the desire for a comfortable liquid position has also been an important determinant.

In addition to the bad investment experience, efficiency considerations militate against outside investments in the small concern. If the management must keep one eye on the securities markets, it will ordinarily be less effective in the operating end of the business. This handicap can be partially overcome in the large enterprise by employing specialized staffs to handle the investment end of the business. However, even here, the attention of the directors must be divided. As a general rule the stockholders should be given the unneeded earnings. If they lose them in subsequent commitments, they at least have the memories.

Tax on Undistributed Profits.—Section 14 of the Revenue Act of 1936 provided for a tax on undistributed corporate net income ranging from 7% to 27%, depending on the amount of the corporation's net income which was not distributed. The specific provisions were as follows:

7 per centum of the portion of the undistributed net income which is not in excess of 10 per centum of the adjusted net income.

12 per centum of the portion of the undistributed net income which is in excess of 10 per centum and not in excess of 20 per centum of the adjusted net income.

17 per centum of the portion of the undistributed net income which is in excess of 20 per centum and not in excess of 40 per centum of the adjusted net income.

22 per centum of the portion of the undistributed net income which is in excess of 40 per centum and not in excess of 60 per centum of the adjusted net income.

27 per centum of the portion of the undistributed net income which is in excess of 60 per centum of the adjusted net income.

One of the arguments for this tax was that individuals with large incomes were escaping high surtaxes by leaving earnings in the corporations. The undistributed profits tax was intended to force distribution of earnings and thus swell the individual incomes in the high surtax brackets. At the time the tax was proposed, the treasury experts recommended that the income tax on corporations be withdrawn entirely. Congress passed the new tax but did not withdraw the income taxes. Subsequent events proved that the treasury had entirely misjudged the situation and that revenues would have fallen short by billions had Congress accepted the Treasury proposal in full.

The tax violated all principles of sound finance. It made no allowance for any reserves whatever or the reduction of debt from earnings, thus encouraging weak financial structures. Under a ruling of the Commissioner of Internal Revenue a corporation was not even allowed to make good an impairment of capital stock without subjecting itself to the progressive tax. Its chief merit, if one, was that it caused heavy dividend distributions and an artificial temporary stimulus to business at election time in 1936. As a revenue producer it did little. Large incomes had other avenues of escape. Even assuming that the other loopholes had been entirely plugged and that tax-exempt securities had been eliminated, it would have been absurd to expect the 1936 undistributed profits tax rates to correct the practice of retaining earnings in corporations in order to escape upper surtax brackets. Federal income tax rates ran up to a maximum of 79% in the highest bracket. Some state income tax rates ran up to an additional 15%. On the other hand, the undistributed profits taxes ranged from 7% to 27%. It was absurd to think that these rates would force individuals subject to higher rates of tax to declare dividends out of corporations which they were by hypothesis controlling in order to reduce their own tax liability.

It does not appear from the dividend records of 1936-1937, that the wealthy had been controlling dividend policies on an excessive scale in order to reduce their personal incomes. However, had loopholes been effectively plugged in the exist-

ing confiscatory tax laws, the government might well have found that it was fostering such controlled dividend policies. No individual, wealthy or not, is likely to submit readily to practical confiscation of his income for the maintenance of ponderous political machines doing lip service to public welfare. Had taxation become too severe, it is probable that, in spite of the tax, earnings would have been retained by corporations.

Availability of Surplus.—Assuming that the accounts of the corporation correctly reflect the economic facts, availability of surplus is a legal question. The statutes under which the corporation is organized will specify under what circumstances dividends may be paid or may not be paid. In the absence of specific statutory provisions the courts of the state will have passed on some types of situations and will thereby have established a common law policy. As a general proposition, dividends can be paid if there is an excess of assets over the sum of the liabilities plus the stated amount of the capital stock. This is the specific test applied by some statutes, e.g., Colorado, and is the ultimate result of the more cumbersome provisions of the statutes and decisions of most of the other states. The statutory and common law restrictions represent what public policy has dictated as minimum essentials for the protection, not only of creditors, but also of the general and investing public.

In addition to the limits imposed by the states, dividends may be limited by contractual restrictions. The charter or by-laws of a corporation frequently contain provisions relating to dividends. The directors must bow to these provisions or secure an amendment to the charter or by-laws which curtail their action. In some cases a resolution of stockholders may control the scope of dividend declarations by the board. Finally, provisions of bonds, of preferred stock contracts, and of borrowing agreements with banks and other short-term creditors may effectively limit the right of directors to declare dividends. These restrictions are imposed on a corporation so that the assets protecting creditors will not be depleted. The

more earnings reinvested in the business, the greater is the protective equity. The less cash withdrawn, the greater is the ability of the corporation to meet claims against it. In the case of preferred stock, restrictions are designed to protect the holder against antagonistic interests of common stockholders.

Reduction of Capital Stock to Permit Dividends.—In case the assets do not exceed the sum of the liabilities plus the stated amount of the capital stock (a state of "impaired capital" or "impaired capital stock"), the corporation can usually adjust the stated amount of its capital stock so that a dividend can be paid. Most corporation laws permit companies to reduce the stated amount of their capital stocks by filing amendments to their charters of incorporation. Hence, by the mere formalities of a stockholders' meeting and the filing of the ratified amendment the corporation can start on a new dividend cycle. The practice of reducing capital stock assumes large proportions during depression periods. For example, the *Wall Street Journal,* May 22, 1931, reported wholesale changes among investment trusts, saying:

> The following are some of the prominent investment corporations which have made such changes this year or have proposed such changes, giving the figure at which the stock was formerly carried in the balance sheet and the new rate:

	Stated Value a Share	
	Old	New
Niagara Share Corp. of Maryland	$10	$5
Sisto Financial Corp.	25	1
Vick Financial Corp.	10	5
Petroleum Corp of America	17	5
*Prince & Whitely Trading, pfd. no par	..	25
Prince & Whitely Trading, com. no par	..	1
Goldman Sachs Trading	27.50	5
Second National Investors	5	1
Third National Investors	40	1
Fourth National Investors	40	1
Selected Industries	†	†
Commonwealth Securities, Inc.	10	1
Federated Capital	5	..
Insuranshares Corp. of Delaware	‡	‡
National Bond & Share	50	25

	Old	New
Mayflower Associates	50	20
Capital Administration	20	1
Standard Investing, pfd.	100	50
Standard Investing	4.45	1

* Now Phoenix Securities Corp. † Stated capital of all classes of stock reduced by one-fourth. ‡ One new common share to be exchanged for two no-par A common shares, which had stated value of $5 and paid-in surplus of $15, against par value of $1 for new common and paid-in surplus of $39 a share. One new no-par B share to be exchanged for two no-par B common shares.

With these changes in describing stated capital statistically in the balance sheet, there has been adopted generally a policy of paying out in dividends all of the net income from interest and dividend receipts.

As the procedure for these reductions is discussed in detail in a prior chapter, it need not detain us further at this point.

Preferred Stock.—Rates of dividend on preferred stock are usually fixed by the contract. Exceptions occur in the participating stocks. The dates of payment are also specified. However, the directors do not have to pay the dividends unless their judgment so dictates. The contract may restrict the corporation in case of non-payment, but the directors are still supreme, subject to the restrictions. Ordinary tests of policy apply to dividends on preferred as well as common stock. The corporation must have a surplus and must be able to spare the cash. If no dividends are to be paid on common, the directors can pass the preferred dividend and reinvest the proceeds. This policy has the advantage that no interest is paid on the accumulated preferred dividends during the default. If a large accumulation develops, it may be funded and never paid in cash. The practice of funding accumulations is general and is discussed in the chapter on recapitalization.

Procedure.—Dates on which the boards of directors are to consider dividends are frequently inserted in the by-laws of corporations. This practice has the advantage of enabling the stockholder to keep track of the actions of the board. However, unless the board is restricted by charter or by-law, it can act on dividends at any time. When the board acts, the resolution is, of course, entered in the minutes of the meeting and under good practice forthwith announced to the public so that

insiders cannot take advantage of those who do not know what action has been taken. The resolutions will specify what date will be taken as the record date. That is the date as of which the list of stockholders will be compiled for purposes of sending out dividend checks. All those registered as stockholders on that date will receive checks whether or not they hold the stock at date of payment. This date is usually set at some time after the date of action by the board. The interval gives holders who have not transferred their stock to their own names an opportunity to do so. It also gives buyers and sellers an opportunity to trade with full knowledge of the facts.

The resolution will also fix a date for payment of the dividend. This date will ordinarily be later than the date of record. The interim will permit the compilation of the stockholder lists and the making and mailing of checks. The date will also be fixed with reference to the cash budget so that strain will be avoided.

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